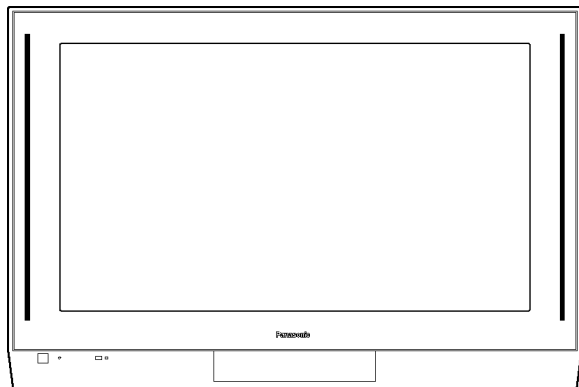


Service Manual

Digital Progressive Plasma Television



TH-37PE30B
TH-42PE30B
 GP6DE Chassis

Specifications

Power Source	220 V -240 V 50 Hz /60 Hz A.C.
Power Consumption	
Normal use	253 W (TH-37PE30B), 323 W (TH-42PE30B)
Standby	1.8 W (TV only), 15.0 W (TV + DVB system set to record Timer programmes)
Power-OFF	1.0 W
Plasma Display panel	
Drive method	AC type
Aspect Ratio	16:9
Contrast Ratio	4000:1
Screen size (No.of pixels)	37-inch (TH-37PE30B) 818 mm (W) × 461 mm (H) × 939 mm (diagonal) 42-inch (TH-42PE30B) 920 mm (W) × 518 mm (H) × 1,056 mm (diagonal) 408,960 (852 (W) × 480 (H)) [2,556 × 480 dots]
Sound	
Speaker	Woofer ϕ 80 mm × 2, Tweeter 16 mm × 73 mm × 8
Audio Output	26 W [8 W +8 W, 5 W +5 W] ((10 %THD)
Headphone	M3 (3.5 mm) Jack × 1
Applicable signals	
Colour System	NTSC, PAL, PAL60, SECAM, Modified NTSC
Scanning format	525 (480) /60i • 60p, 625 (575) /50i • 50p
PC signals	VGA display VGA SVGA, XGA, SXGA, UXGA (compressed) Horizontal scanning frequency 15 - 110 kHz Vertical scanning frequency 48 - 120 Hz
Receiving Systems/Band name	PAL I UHF E21 - 68.

PAL 525/60	Playback of NTSC tape from some PAL Video recorders (VCR)
DVB	Digital terrestrial services via UHF aerial input.
M.NTSC	Playback from M.NTSC Video recorders (VCR)
NTSC (AV INPUT ONLY)	Playback from NTSC Video recorders (VCR)

OUTPUT

AUDIO OUT	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms
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INPUT

AV3-Front	VIDEO (RCA Pin Type × 2)	1.0 Vp-p (75 Ω)
	S-VIDEO (MINI DIN 4-pin)	Y: 1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω)
	AUDIO L-R (RCA Pin Type × 2)	0.5 Vrms
AV4C-Rear	Y	1.0 Vp-p (including synchronization)
	P _B /P _R	±0.35 Vp-p
PC	(HIGH-DENSITY D-SUB 15PIN)	R, G, B/ 0.7 Vp-p (75 Ω)
		HD, VD / 1.0 - 5.0 Vp-p (high impedance)
Others	SD Card slot × 1, PC Card slot × 1	

INPUT/OUTPUT

AV1-Rear	21 Pin terminal (Audio/Video in, TV out, RGB in)
AV2-Rear	21 Pin terminal (Audio/Video in, Audio/Video out, S-Video in, Q-Link)
AV4-Rear	21 Pin terminal (Audio/Video in, Audio/Video out, S-Video in, RGB in, Q-Link)

ANT-Rear

UHF / VHF

Operating Conditions

Temperature :0 ° - 40 °C
Humidity :20 % - 80 %RH (non-condensing)

Accessories Supplied

Operating Instructions	TQBC0719-1
Mains Lead	K2CT3DH00017
Remote Control Transmitter	EUR7635010
Batteries	2 × R6 Size
Clamper	TMME206 × 2
Ferrite core	Large size × 2, Small size × 5

Dimensions (W × H × D)	1,040 mm × 697 mm × 139 mm (TH-37PE30B)
	1,140 mm × 757 mm × 139 mm (TH-42PE30B)

Mass (Weight)	34.5 kg (TH-37PE30B)
	41.0 kg (TH-42PE30B)

Notes:

- Design and specifications are subject to change without notice. Mass and dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.
EN55013, EN61000-3-2, EN61000-3-3, EN55020.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Applicable signals

Applicable input signals for PC Input (D-sub 15P) (* Mark)

	Signal name	Horizontal frequency(kHz)	Vertical frequency(Hz)	PC
1	640 × 400 @70 Hz	31.47	70.00	*
2	640 × 480 @60 Hz	31.47	59.94	*
3	Macintosh13" (640 × 480)	35.00	66.67	*
4	640 × 480 @75 Hz	37.50	75.00	*
5	852 × 480 @60 Hz	31.50	60.00	*
6	800 × 600 @60 Hz	37.88	60.32	*
7	800 × 600 @75 Hz	46.88	75.00	*
8	800 × 600 @85 Hz	53.67	85.06	*
9	Macintosh16" (832 × 624)	49.73	74.55	*
10	1,024 × 768 @60 Hz	48.36	60.00	*
11	1,024 × 768 @70 Hz	56.48	70.07	*
12	1,024 × 768 @75 Hz	60.02	75.03	*
13	1,024 × 768 @85 Hz	68.68	85.00	*
14	Macintosh21" (1,152 × 870)	68.68	75.06	*
15	1,280 × 1,024 @60 Hz	63.98	60.02	*
16	1,280 × 1,024 @75 Hz	79.98	75.03	*
17	1,280 × 1,024 @85 Hz	91.15	85.02	*
18	1,600 × 1,200 @60 Hz	75.00	60.00	*

Note:

Signals other than above may not be displayed properly.

2 Safety Precautions

2.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.2. Touch-Current Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use Leakage Current Tester (Simpson 228 or equivalent) to measure the potential across the measuring network.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reserve the AC plug in the AC outlet and repeat each of the above measure.
6. The potential at any point (TOUGH CURRENT) expressed as voltage U_1 and U_2 , does not exceed the following values:
For a. c.: $U_1 = 35 \text{ V}$ (peak) and $U_2 = 0.35 \text{ V}$ (peak);
For d. c.: $U_1 = 1.0 \text{ V}$,

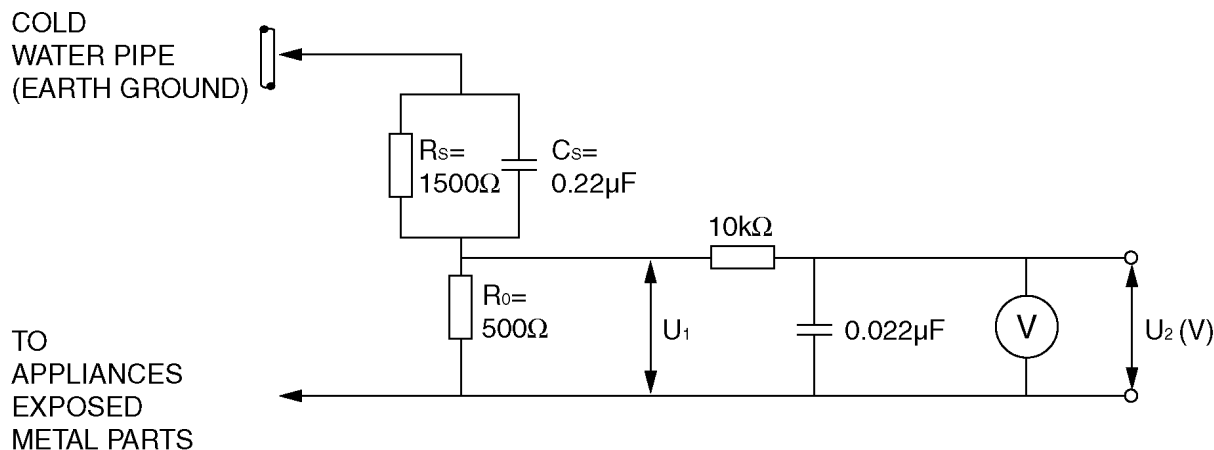
Note:

The limit value of $U_2 = 0.35 \text{ V}$ (peak) for a. c. and $U_1 = 1.0 \text{ V}$ for d. c. correspond to the values 0.7 mA (peak) a. c. and 2.0 mA d. c.

The limit value $U_1 = 35 \text{ V}$ (peak) for a. c. correspond to the value 70 mA (peak) a. c. for frequencies greater than 100 kHz .

7. In case a measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

Measuring network for TOUCH CURRENTS



Resistance values in ohms (Ω)

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance: $\geq 1 \text{ M}\Omega$

Input capacitance: $\leq 200 \text{ pF}$

Frequency range: 15 Hz to 1 MHz and d.c. respectively

NOTE - Appropriate measures should be taken to obtain the correct value in case of non-sinusoidal waveforms.

Figure 1

3 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by $\triangle$ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4 About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

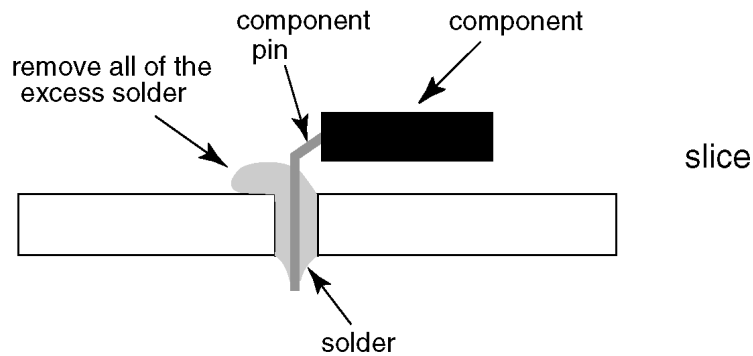
PCBs manufactured using lead free solder will have the PbF within a leaf Symbol  stamped on the back of PCB.

Caution

- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).

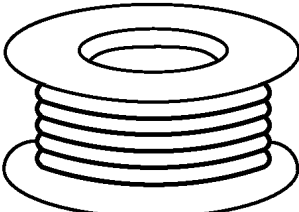
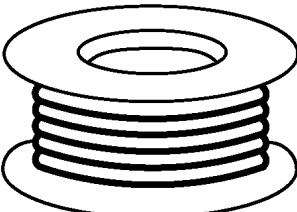
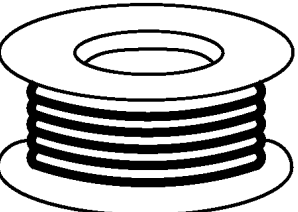
If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.

- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



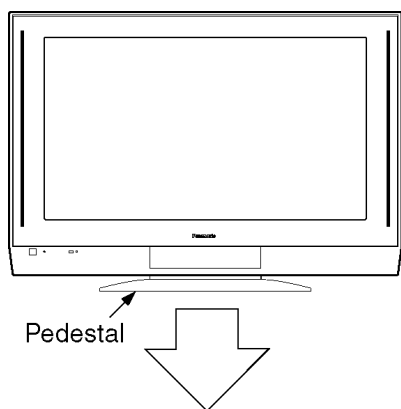
Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.

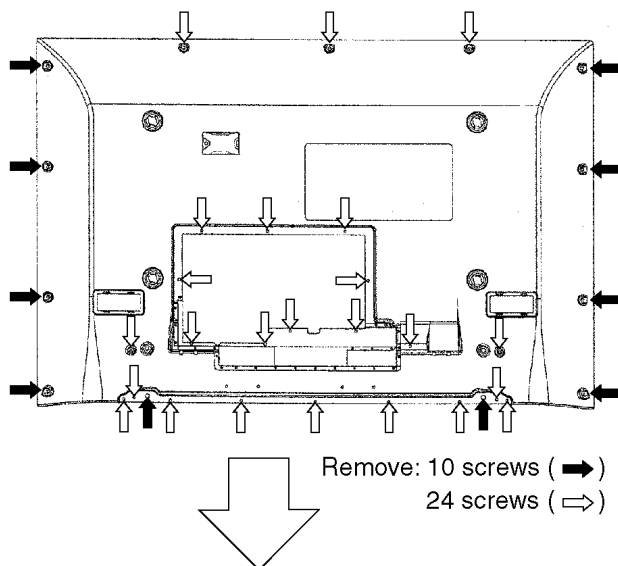
0.3mm X 100g	0.6mm X 100g	1.0mm X 100g
		

5 Service Hint

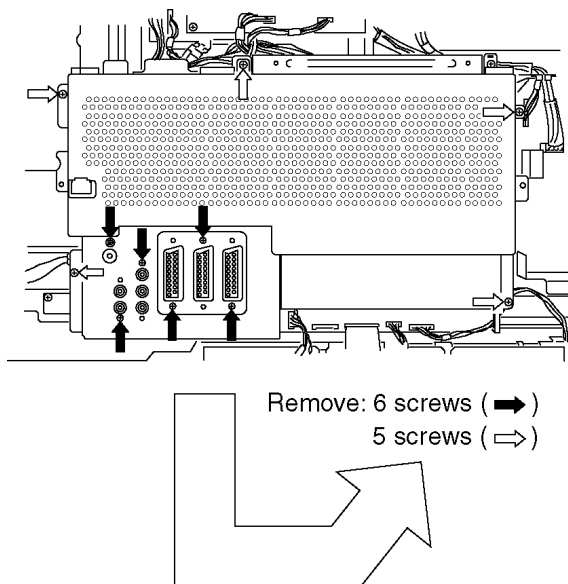
Stand the unit used for pedestal.



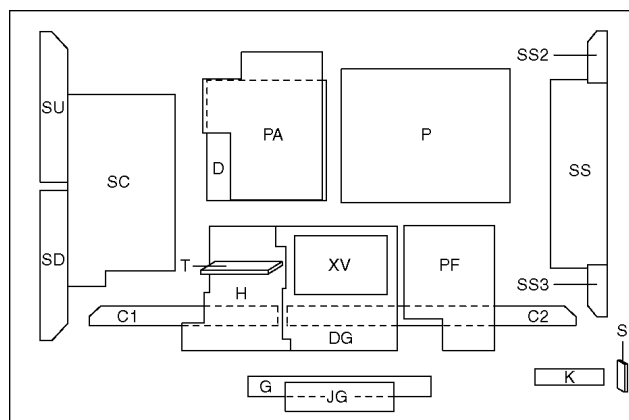
Remove the Rear Cover.



Remove the AV Connector Cover.



Service position.

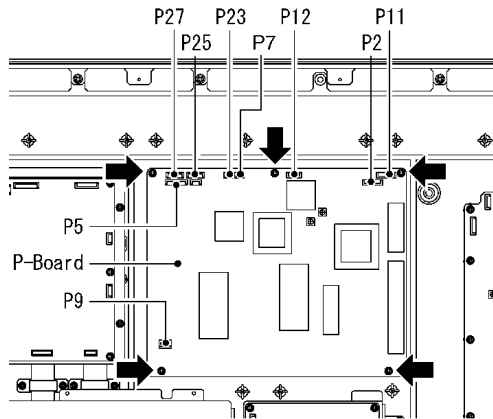


Board Name	Function
C1	DATA DRIVER (RIGHT)
C2	DATA DRIVER (LEFT)
D	DIGITAL SIGNAL PROCESS
DG	DIGITAL CORE, MICOM
G	FRONT TERMINAL, SWITCH
H	REAR TERMINAL
JG	SD CARD/PC CARD, JPEG I/F D/A
K	LED, REMOTE, POWER SWITCH
P	POWER SUPPLY
PA	DC/DC, AUDIO
PF	LINE FILTER
S	POWER SWITCH
SC	SCAN DRIVE
SD	SCAN OUT (DOWN)
SS	SUSTAIN DRIVE
SS2	SUSTAIN CONNECTION (UP)
SS3	SUSTAIN CONNECTION (DOWN)
SU	SCAN OUT (UP)
T	TUNER
XV	DVB TUNER

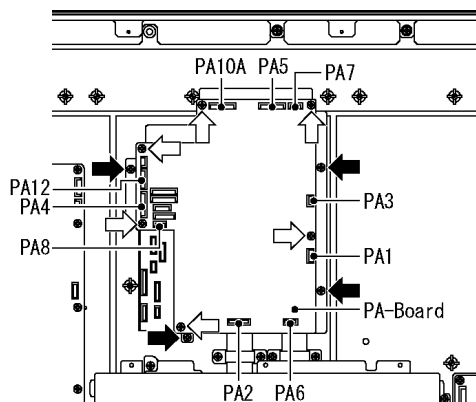
6 P.C.Board and Plasma panel replacement method

■ To replace the plasma panel (finished), place the unit on the servicing stand, remove the front frame (finished), and replace the panel, being careful not to scratch the plasma panel surface.

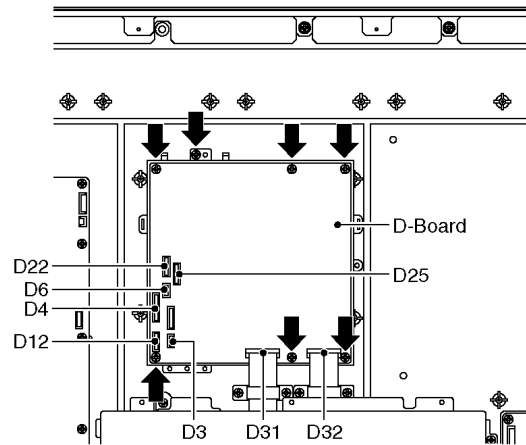
1. Remove the rear cover and the AV connector cover.
2. Remove the P-Board.
 - a. Remove the couplers (P2, P5, P7, P9, P11, P12, P23, P25, P27).
 - b. Remove the screws (×5) and remove the P-Board.



3. Remove the PA-Board.
 - a. Remove the couplers (PA1, PA2, PA3, PA4, PA5, PA6, PA7, PA8, PA10A, PA12).
 - b. Remove the screws (×4 ➡) and remove the PA-Board with the PA-Board Bracket.
 - c. Remove the screws (×6 ⇨) and remove the PA-Board.



4. Remove the D-Board.
 - a. Disconnect the couplers (D3, D4, D6, D12, D22, D25) and the flexible cables (D31, D32).
 - b. Remove the screws (×7) and remove the D-Board with the bracket.

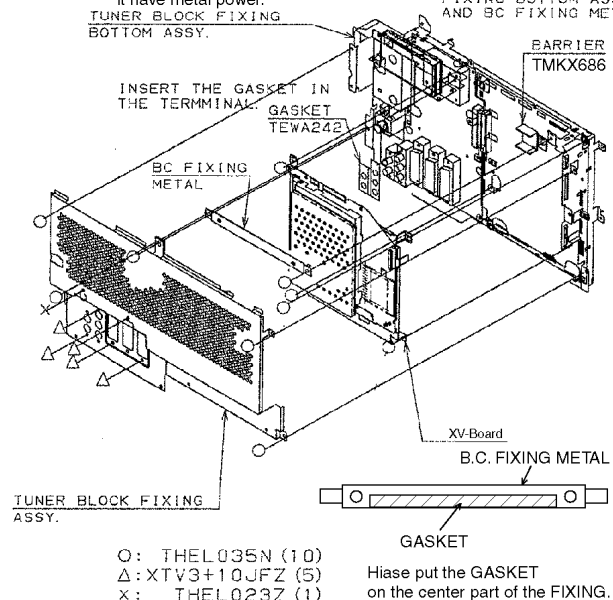


5. Remove the XV-Board.

FIX XV-UNIT TO TUNER BLOCK FIXING BOTTOM ASSY. AFTER FIX BC FIXING METAL AND TUNER BLOCK FIXING TOP ASSY.

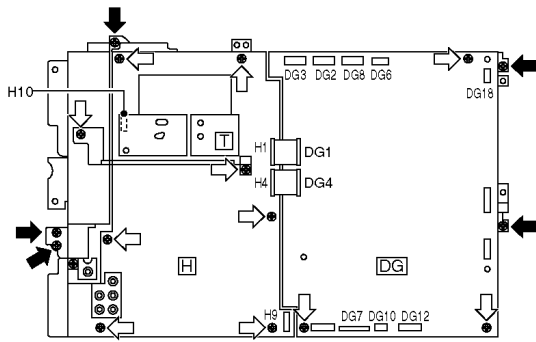
(NOTE) Don't use removed the screw again, inben remove the tapping screw, it have metal power.

INSTALL THE BARRIER BETWEEN TUNER BLOCK FIXING BOTTOM ASSY. AND BC FIXING METAL.

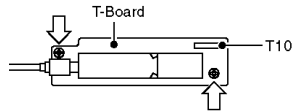


6. Remove the DG-Board, the H-Board and the T-Board.

- a. Remove the couplers (DG2, DG3, DG6, DG8, DG10, DG12, H9), a flexible cable (DG7), and the screws (×5 ➡).
- b. Remove the DG-Board, the H-Board and the T-Board with the bracket.
- c. Remove the bridge connectors (DG1-H1, DG4-H4) and remove the screws (×3 ⇨) on the DG-Board.
- d. Remove the DG-Board.
- e. Remove the screws (×6 ⇨) on the H-Board and the screws (×2 ⇨) on the T-Board bracket.
- f. Remove the coupler (H10) and the antenna cable, remove the T-Board with the T-Board bracket.
- g. Remove the H-Board.

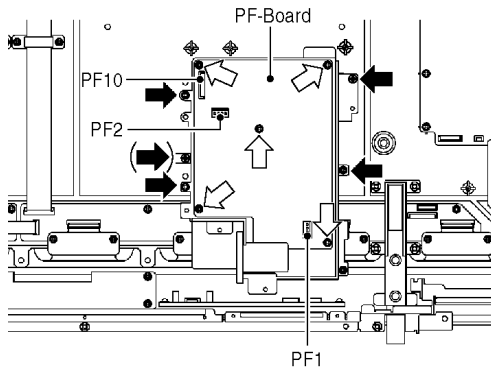


h. Remove the screws (×2) and remove the T-Board.



7. Remove the PF-Board.

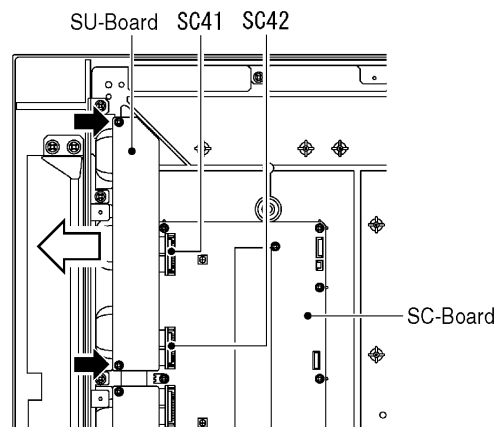
- Remove the couplers (PF2, PF10).
- Remove the screws (×5 ➡), and remove the PF-Board with the Bracket.



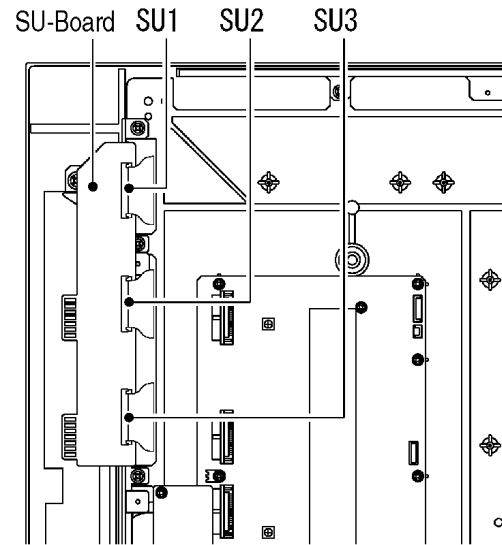
- Remove the coupler (PF1) and remove the screws (×5 ➡).
- Remove the PF-Board.

8. Remove the SU-Board.

- Remove the screws (×2).
- Slide the SU-Board to the left and disconnect from the couplers (SC41, SC42) on the SC-Board.

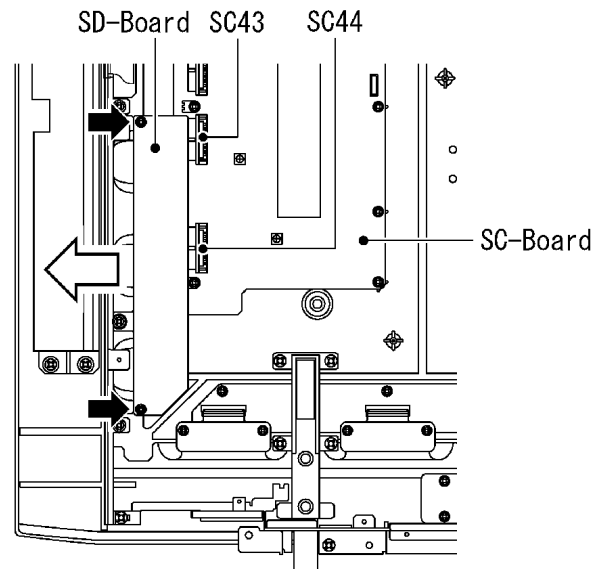


- Remove the flexible cables (SU1, SU2, SU3) connected to the SU-Board, and remove the SU-Board.

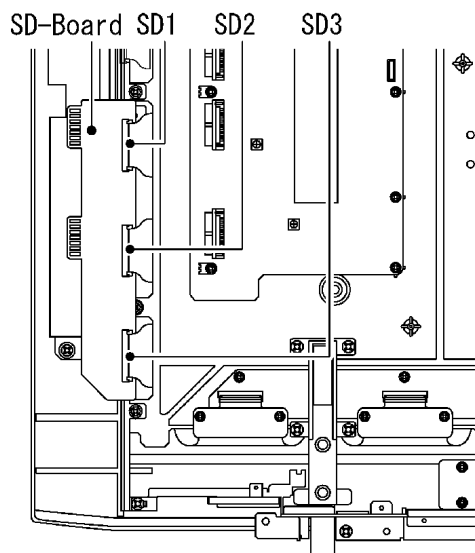


9. Remove the SD-Board.

- Remove the screws (×2).
- Slide the SD-Board to the left and disconnect from the couplers (SC43, SC44) on the SC-Board.

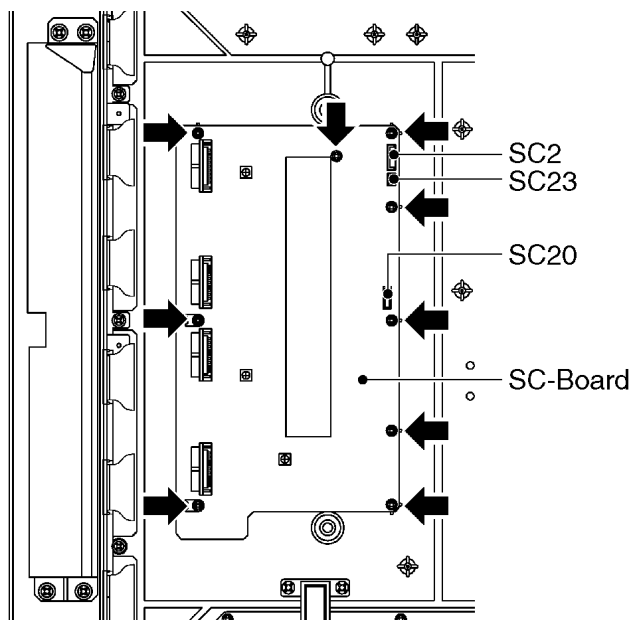


- c. Remove the flexible cables (SD1, SD2, SD3) connected to the SD-Board, and remove the SD-Board.



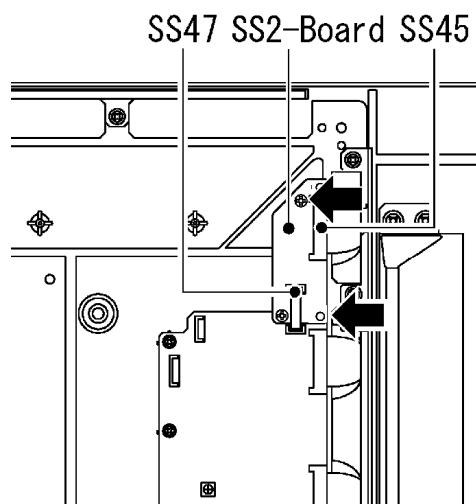
10. Remove the SC-Board.

- a. Remove the couplers (SC2, SC20, SC23), the screws (×9) and remove the SC-Board.



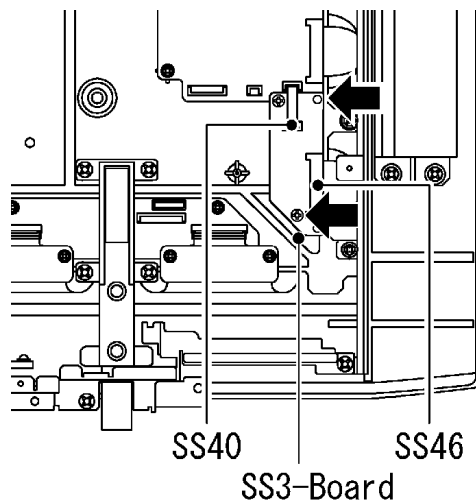
11. Remove the SS2-Board.

- a. Remove the coupler (SS47), and remove the flexible cable (SS45).
b. Remove the screws (×2), and remove the SS2-Board.



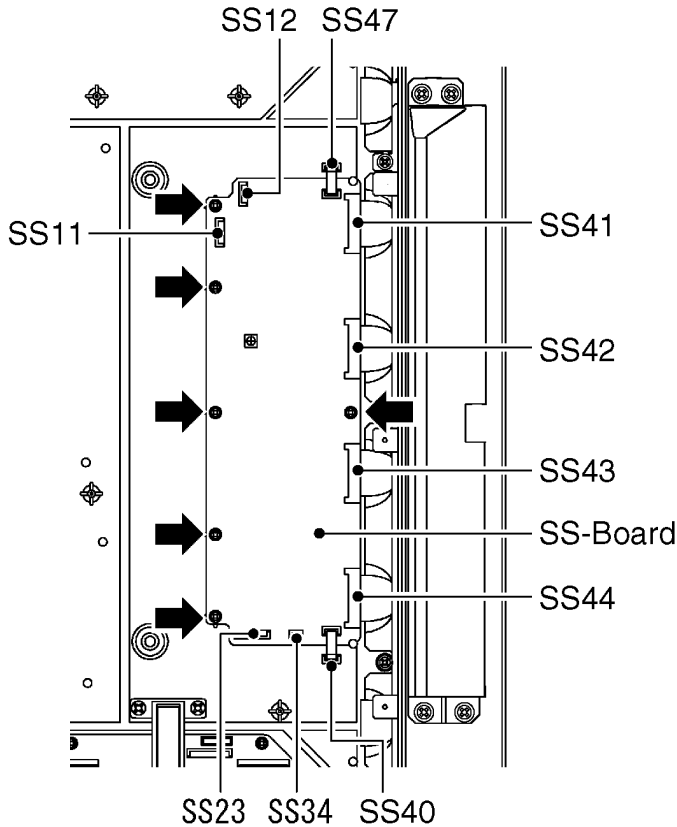
12. Remove the SS3-Board.

- a. Remove the coupler (SS40) and the flexible cable (SS46).
b. Remove the screws (×2), and remove the SS3-Board.



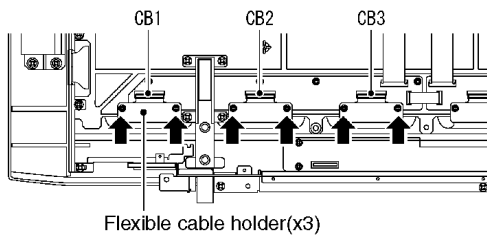
13. Remove the SS-Board.

- Remove the couplers (SS11, SS12, SS23, SS34), and remove the flexible cables (SS40, SS47) on the SS3-Board and SS2-Board.
- Remove the flexible cables (SS41, SS42, SS43, SS44).
- Remove the screws (×6), and remove the SS-Board.

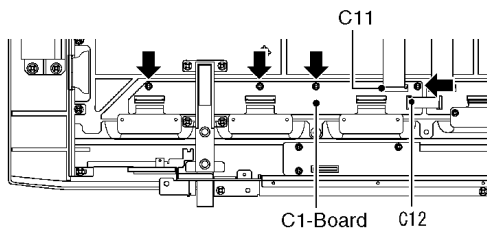


14. Remove the C1-Board.

- Remove the flexible cable holder fastening screws (×6) and remove the flexible cables (CB1, CB2, CB3).

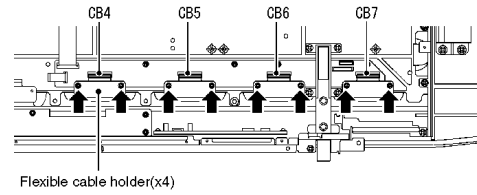


- Remove the flexible cables (C11, C12) release the speaker cables from the clampers (×2) on the C1-Board.
- Remove the screws (×4), and remove the C1-Board.

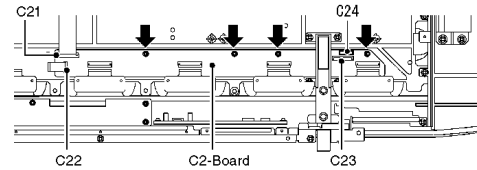


15. Remove the C2-Board.

- Remove the flexible cable holder fastening screws (×8), and remove the flexible cables (CB4, CB5, CB6, CB7).

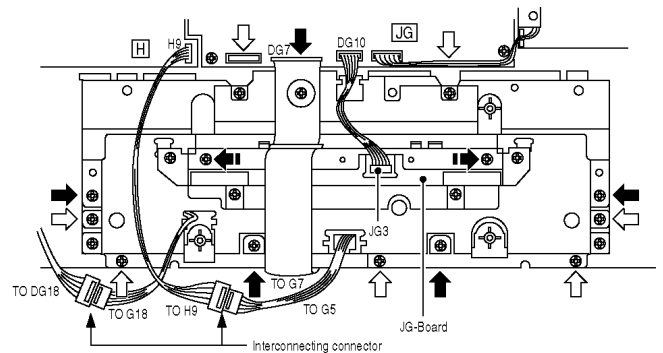


- Remove the couplers (C23, C24), a flexible cable (C21) and release the speaker cables from the clammer on the C2-Board.
- Remove the screws (×4), and remove the C2-Board.

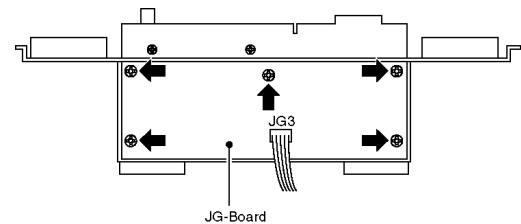


16. Remove the JG-Board and G-Board.

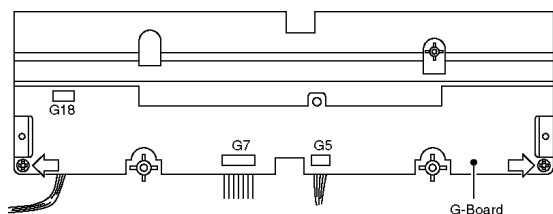
- Remove the screws (×7) fixing the woofer speakers, the interconnecting couplers (×4, to woofer and tweeter) and remove the woofer speakers (right and left).
- Disconnect a coupler (DG10), a flexible cable (DG7) and the couplers of interconnecting connector (from DG18 to G18 and H9 to G5).
- Remove the screws (×5) and remove the JG-Board and G-Board with the Bracket.
- Remove the screws (×7) and remove the JG-Board with Bracket.
- Remove the screws (×2) and remove the Shield case of JG-Board.



- Remove the screws (×5) and remove the JG-Board.

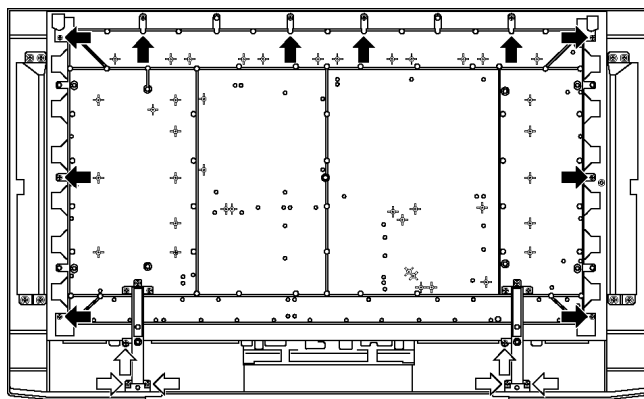


g. Remove the screws (×2) and remove the G-Board.



17. Remove the Front frame (glass).

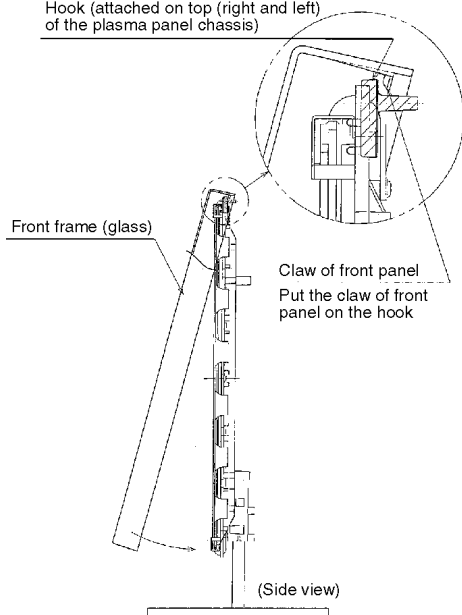
a. Remove the front frame and the plasma panel fastening screws (×10 ➡), and remove the front frame and the stand bracket fastening screws (×6 ➡).



b. Release all cables from the clammer on the bracket of the front frame.

c. For leaving the the plasma panel from the front frame, pull the bottom of the front frame forward, lift, and remove.

Hook (attached on top (right and left) of the plasma panel chassis)

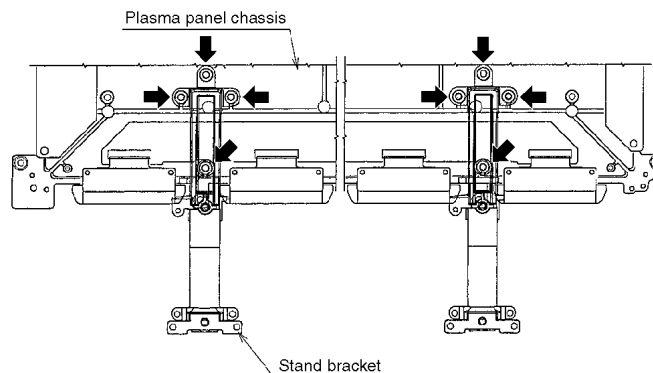


18. Remove stand brackets.

a. Remove the plasma panel section from the servicing stand and lay on a surface such as a table (covered), with the plasma panel surface facing downward.

Spread a soft cloth or similar on the table for protection, so the panel surface is not scratched.

b. Remove the stand bracket (left, right) fastening screws (×4 each) and remove the stand brackets (left, right).



19. Replace the plasma panel (finished).

a. Place the new plasma panel (finished) on the flat surface of the table (covered by a soft cloth), with the plasma panel surface facing downward.

b. Fit the stand brackets (left, right) to the new plasma panel.

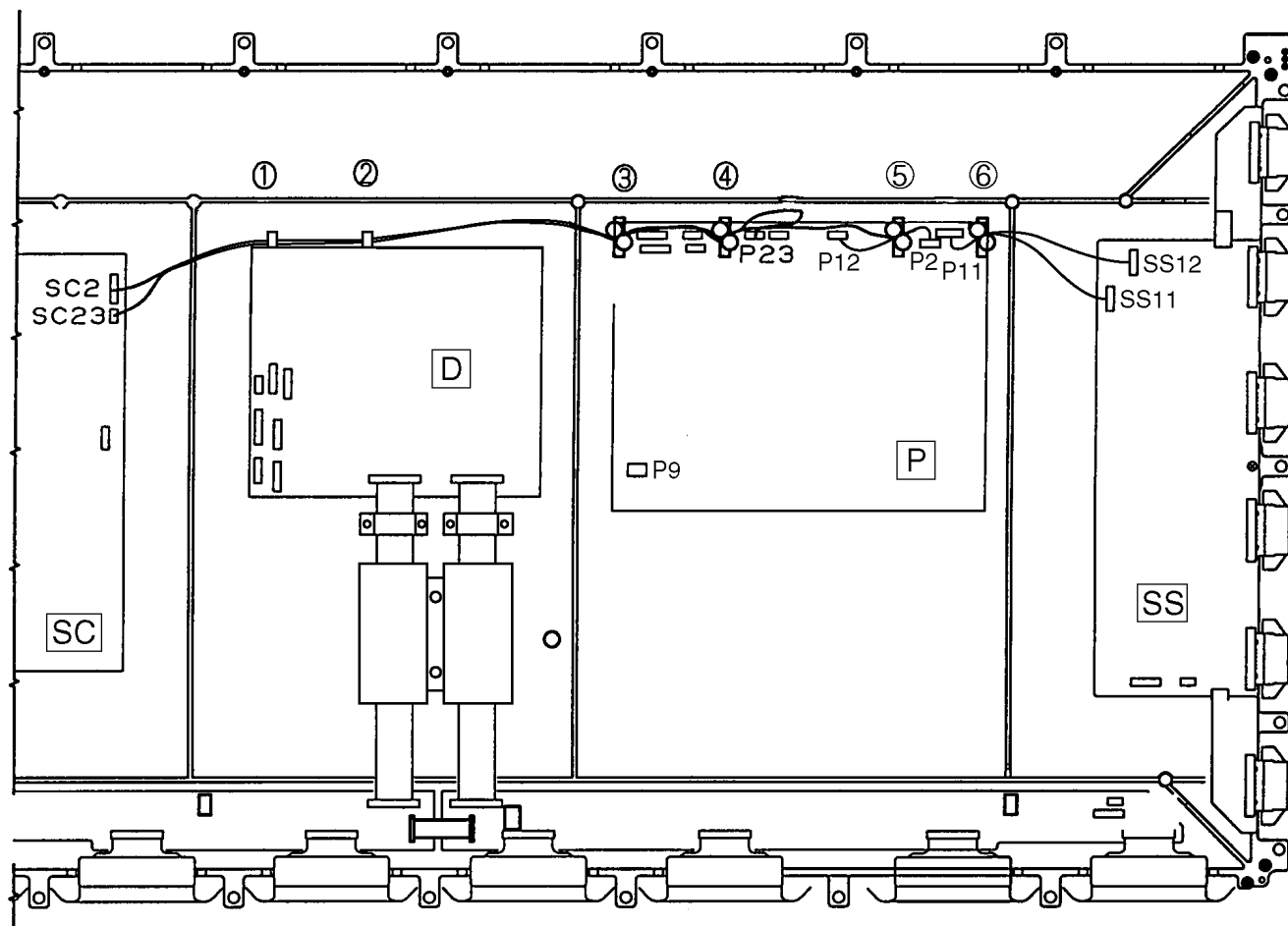
c. Place the plasma panel section on the servicing stand.

d. Attach the front frame and the each P.C.Board and so on, to the new plasma panel.

*** When fitting the front frame, be careful not to allow any debris, dust or handling residues to remain between the front glass and plasma panel.**

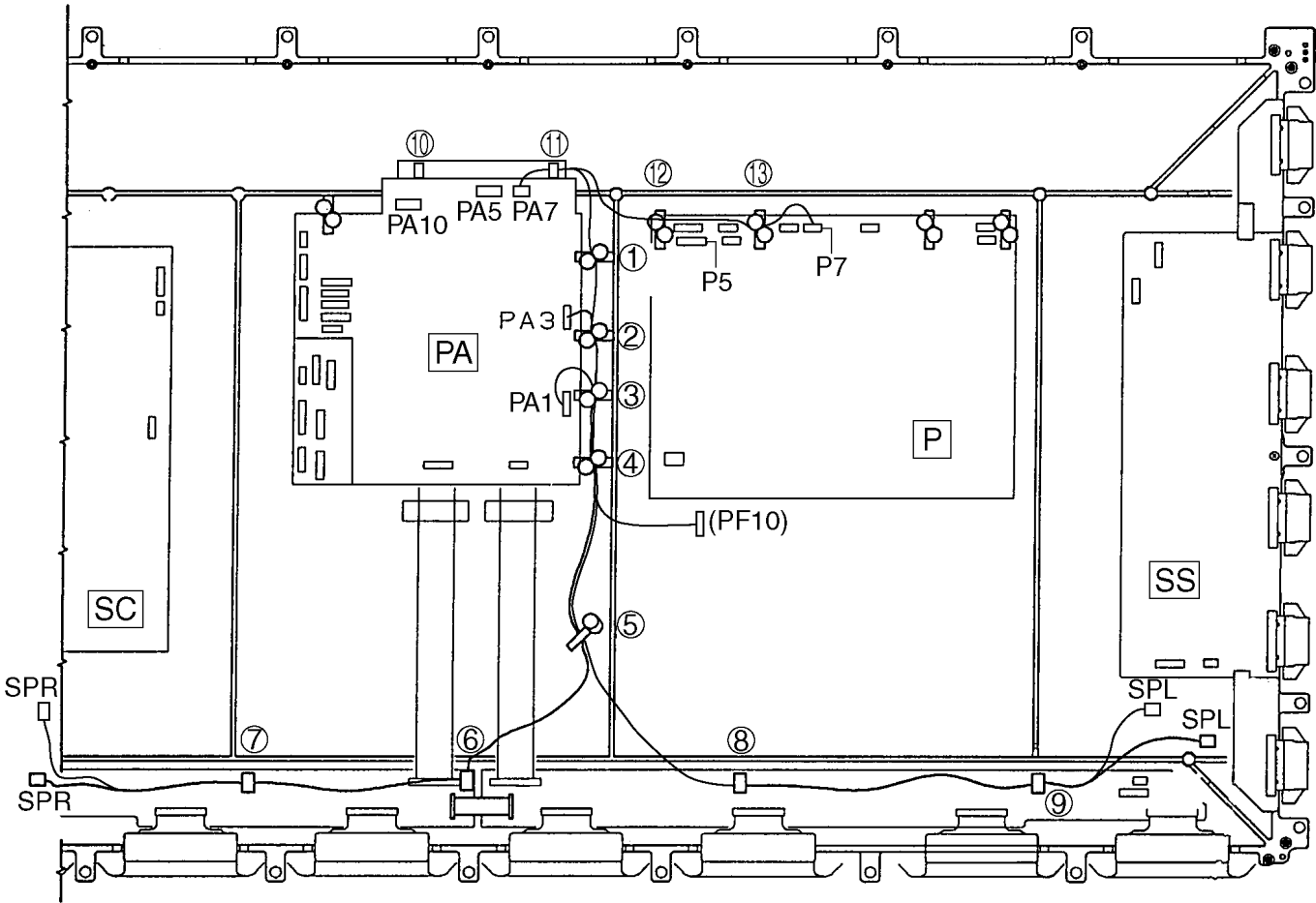
7 Location of Lead Wiring

7.1. Lead of Wiring (1)



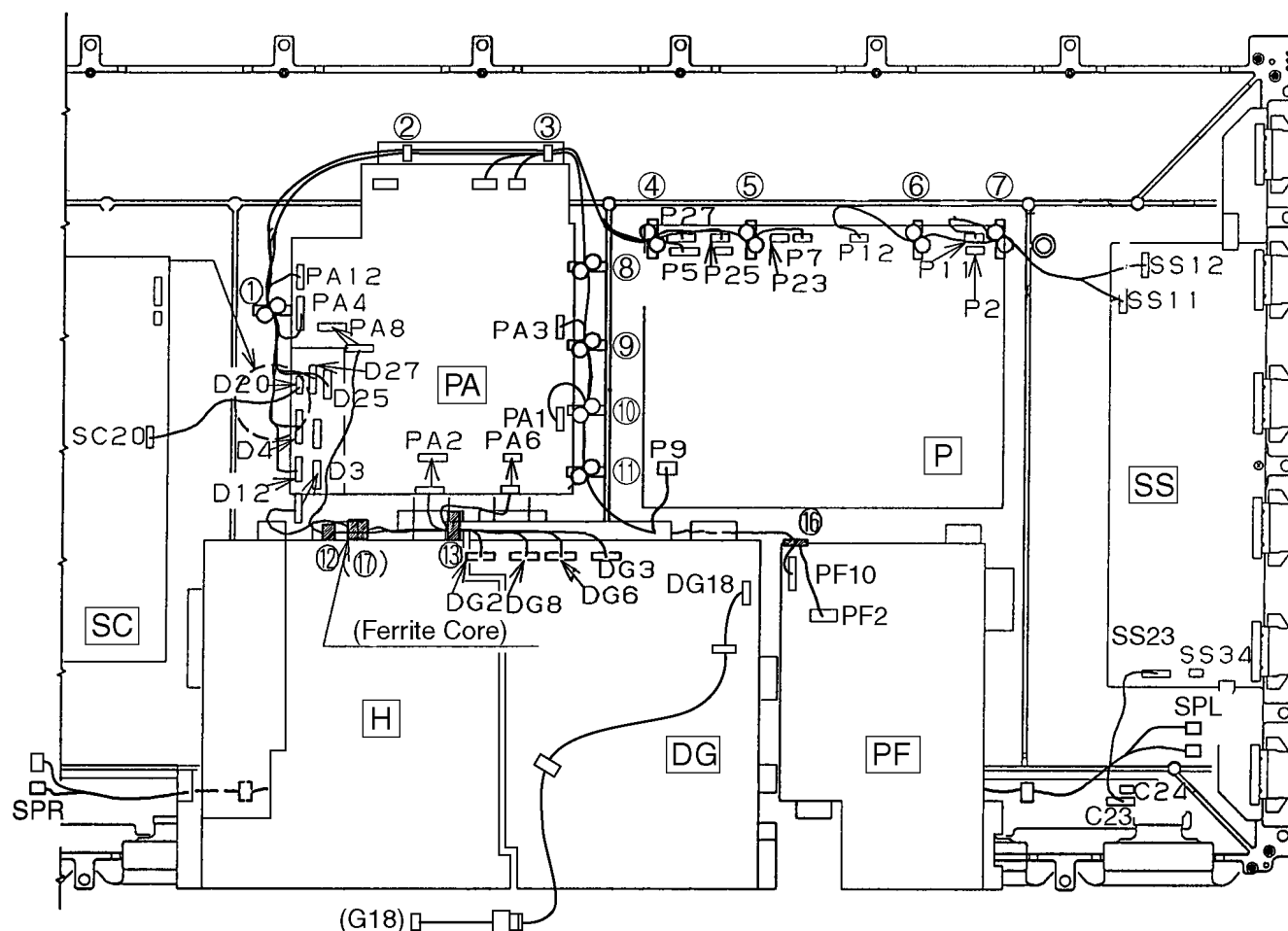
CON:NO.	—	CON:NO.	①	②	③	④	⑤	⑥
SC2	—	P2	○	○	○	○	○	
SC23	—	P23	○	○	○	○		
P12	—	SS12					○	○
P11	—	SS11					○	

7.2. Lead of wiring (2)



CON:NO.	CON:NO.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬
PA3	— SPR		○	○	○	○	○	○						
PA3	— SPL		○	○	○	○			○	○				
PA1	— SPR		○	○	○	○	○	○						
PA1	— SPL		○	○	○	○			○	○				
PA7	— P7											○	○	○
PA5	— P5											○	○	
PA10	— PF10	○	○	○	○						○	○		

7.3. Lead of wiring (3)



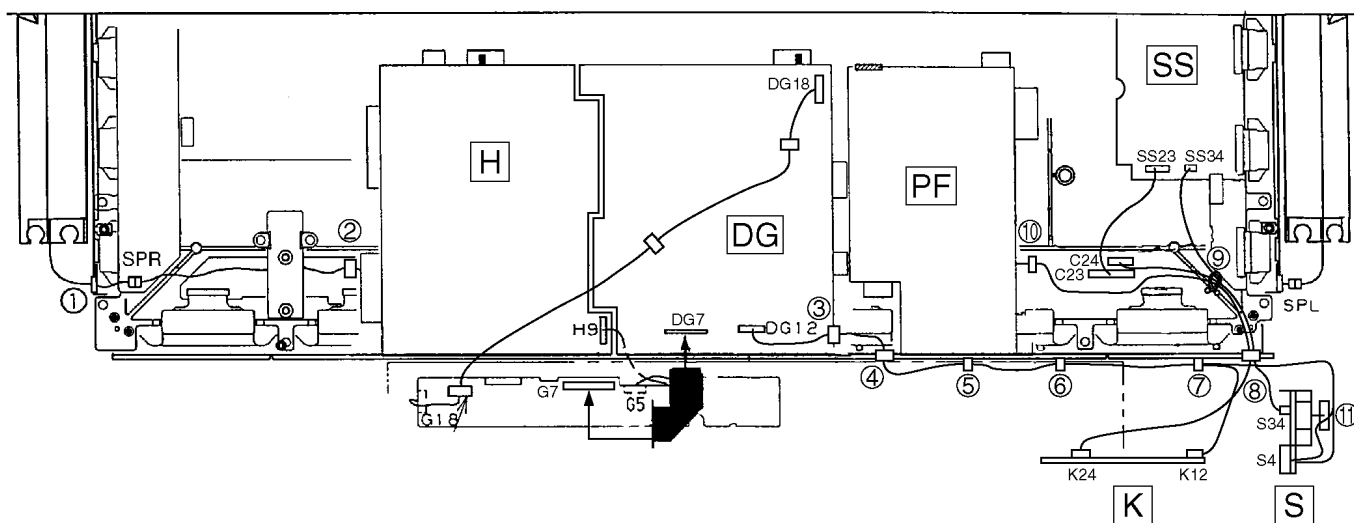
CON:NO.	CON:NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
SC20	D20																	
D12	PA12	○																
D4	PA4	●																
D25	P25	○	○	○	○													
D27	P27	○	○	○	○													
PA5	P5			○	○													
SS11	P11							○										
SS12	P12						○	○										
PA7	P7			○	○	○												
PF2	P9																○	
PA8	DG8												○	○				
SS23	C23													○				
DG2	PA2													○				
DG6	PA6													○				
DG3	D3													○				○
PA10	PF10		○	○					○	○	○	○					○	
SC2	P2				○	○	○											
SC23	P23				○	○												

● Wind up second time

Refer to item 7.1.

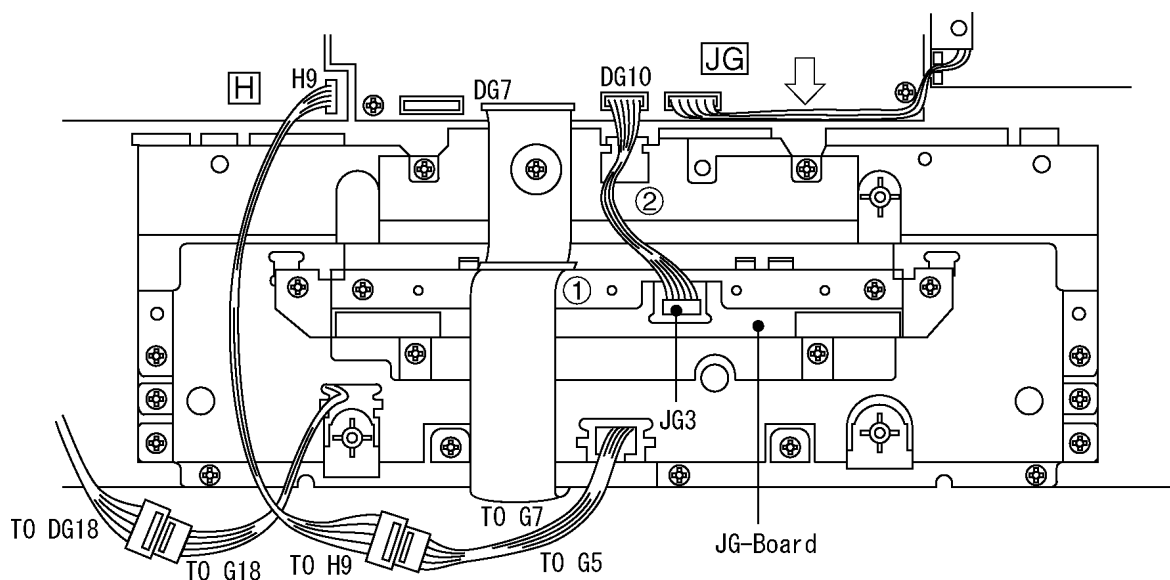
Refer to item 7.1.

7.4. Lead of wiring (4)



CON.NO.	CON.NO.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫
H9	G5												
DG12	K12			○	○	○	○						
K24	C24								○	○			
SS23	C23												
PA1,PA3	SPR	○	○										
PA1,PA3	SPL								○	○	○		
DG12	S4			○	○	○	○					○	
SS34	S34								○	○			

7.5. Lead of wiring (5)



CON:NO. - CON:NO.	①	②
DG7 - G7	○	
JG3 - DG10		○
G18 - DG18		
G5 - H9		

7.6. Lead of wiring (7)

Each connector is connected.

1、XV-PCB Wire (XV2, XV7, XV11)

The first connector connection.

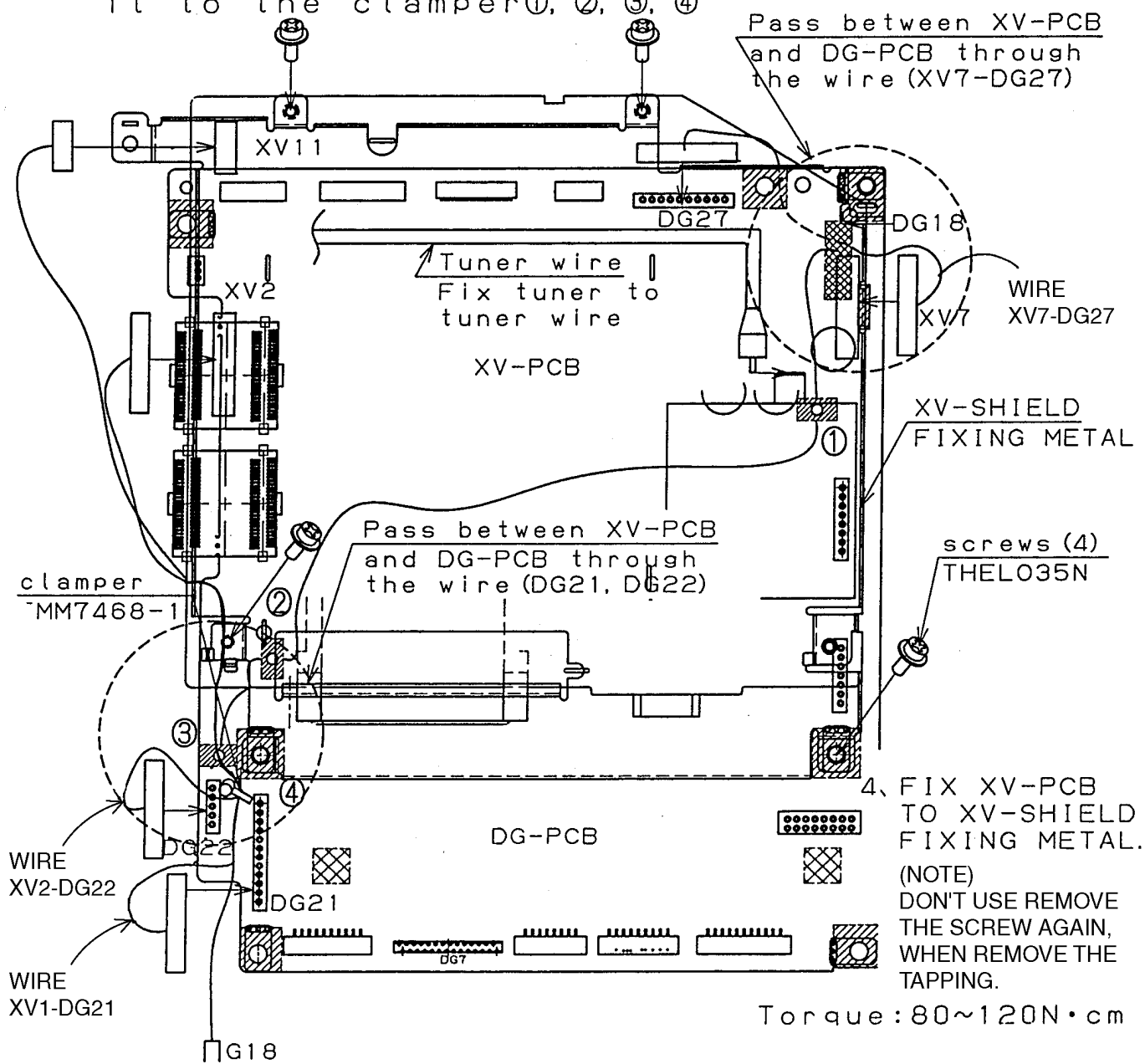
2、DG-PCB wire (*DG18)

The first connector connection.

3、After fix DG-PCB to XV-PCB wire

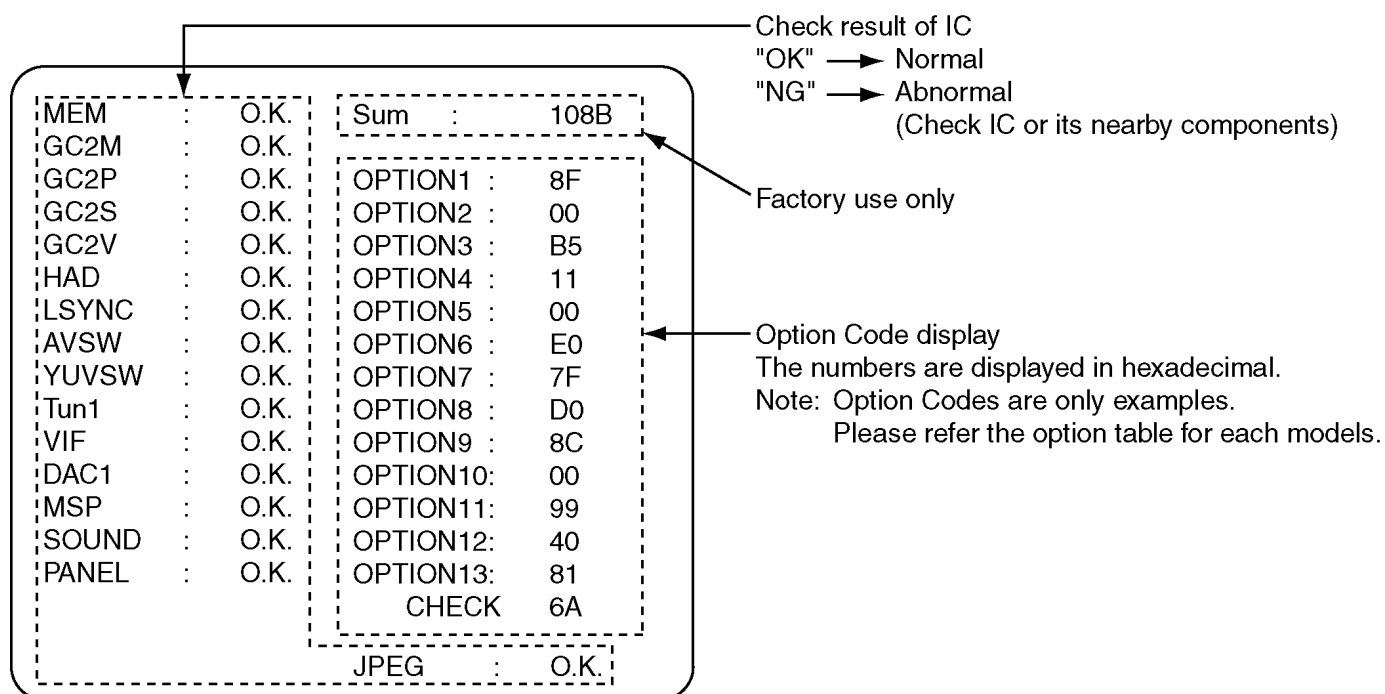
(*DG21, *DG22, DG27) connector connection.

※:After connector connection, Please process it to the clamber①, ②, ③, ④



8 Self Check

1. Self-Check is used to automatically check the bus lines and hexadecimal code of the TV set.
2. To get into the Self -Check mode press the Down (—/√) button on the customer controls at the front of the set, at the same time pressing the Status button on the remote control, and the screen will show :



If the CCU ports have been checked and found to be incorrect or not located then "--" will appear in place of "O.K.".

Display	Ref.No	Description	P.C.B.
MEM	IC1008	EEPROM	DG-BOARD
GC2M	IC1301	GROBAL CORE MAIN	DG-BOARD
GC2P	IC1304	GROBAL CORE SUB	DG-BOARD
GC2S	IC1302	GROBAL CORE 3D Comb	DG-BOARD
GC2V	IC1350	GROBAL CORE V Scalar	DG-BOARD
HAD	IC1851	HD-AD CONVERTER	DG-BOARD
LSYNC	IC2652	SYNC PROCESSOR	H-BOARD
AVSW	IC3200	AV switch	H-BOARD
YUVSW	IC1270	YUV switch	DG-BOARD
Tun1	TNR001	TUNER 1	TU-BOARD
VIF	---	---	---
DAC1	IC3003	Ext. DAC	DG-BOARD
MSP	IC2002	Multi Sound Processor	H-BOARD
SOUND	IC2401	AUDIO AMP	PA-BOARD
PANEL	---	PANEL	---
JPEG	IC60	JPEG I/F	PG-BOARD

8.1. Power LED Blinking timing chart

1. Subject

Information of LED Flashing timing chart.

2. Contents

When an abnormality has occurred on the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinks of the Power LED on the front panel of the unit.

Blinking times	Blinking timing	Contents & Check point
2		SCAN Driver1
3		3.3V SOS
4		5V SOS
5		Power SOS
7		SCAN Driver2
9		SUS Driver
12		PA board Base Voltage (15, 12, 9, 5, 2.5V)

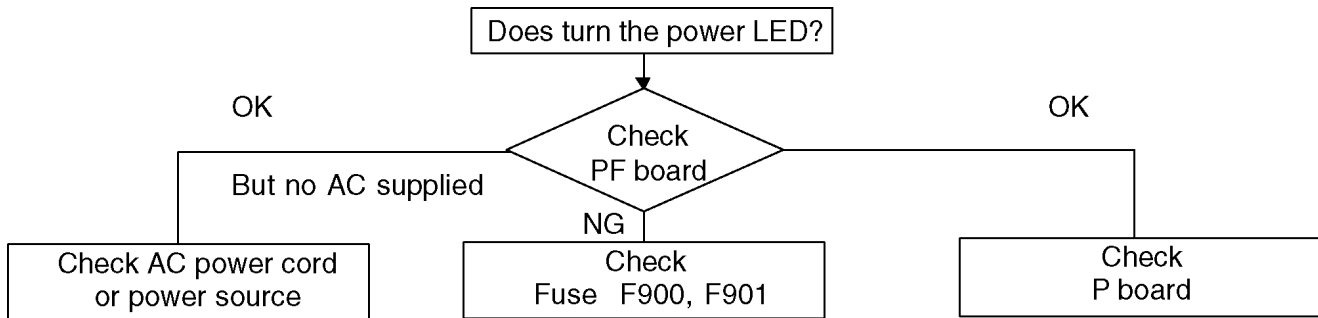
8.2. No Power

First check point

There are following 3 states of No Power indication by power LED.

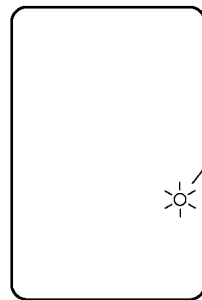
1. No lit
2. Green is lit then turns red blinking a few seconds later.
3. Only red is lit.

1. No lit



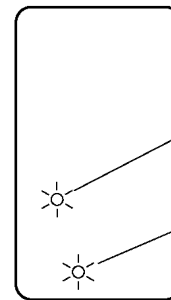
Drive circuits LED indicator

SC board



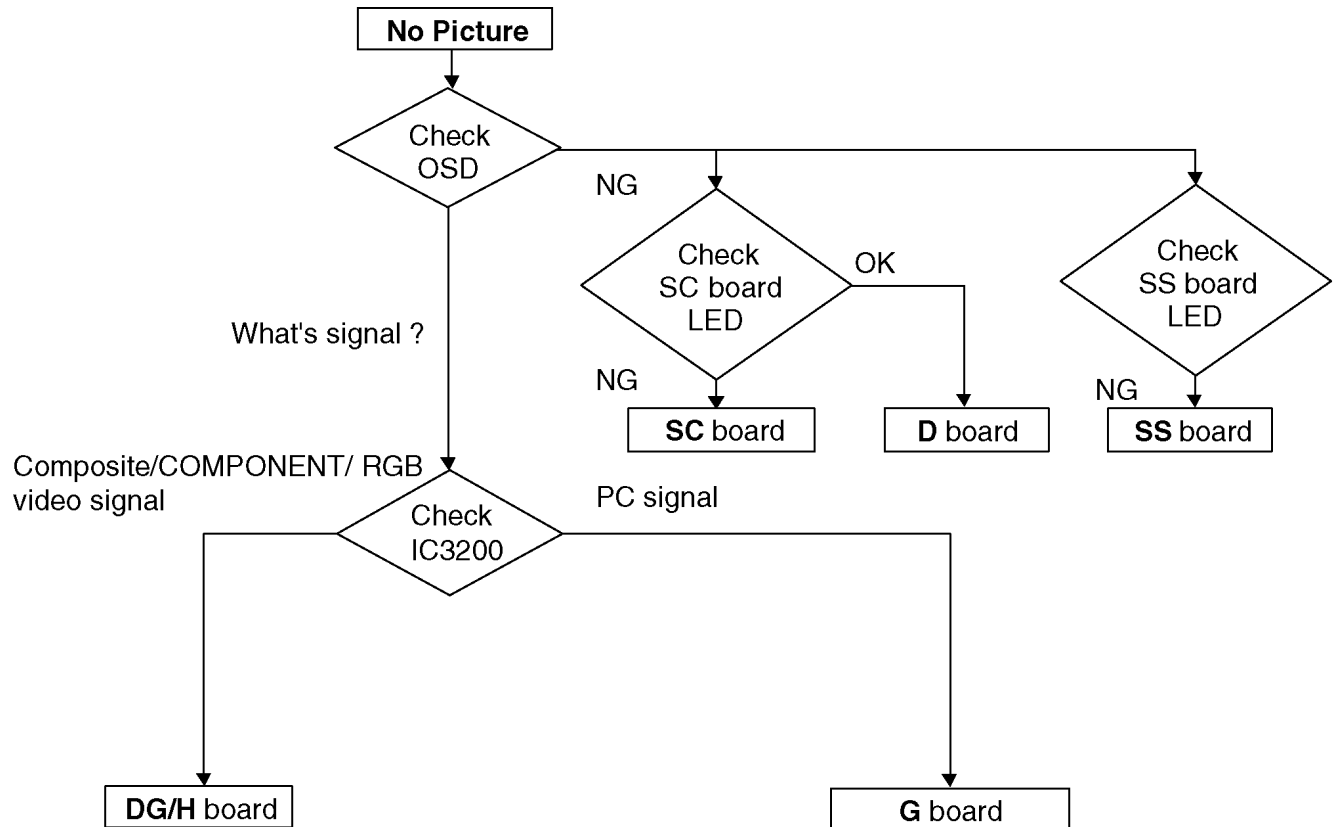
D6583 (RED)
(SOS1)

SS board



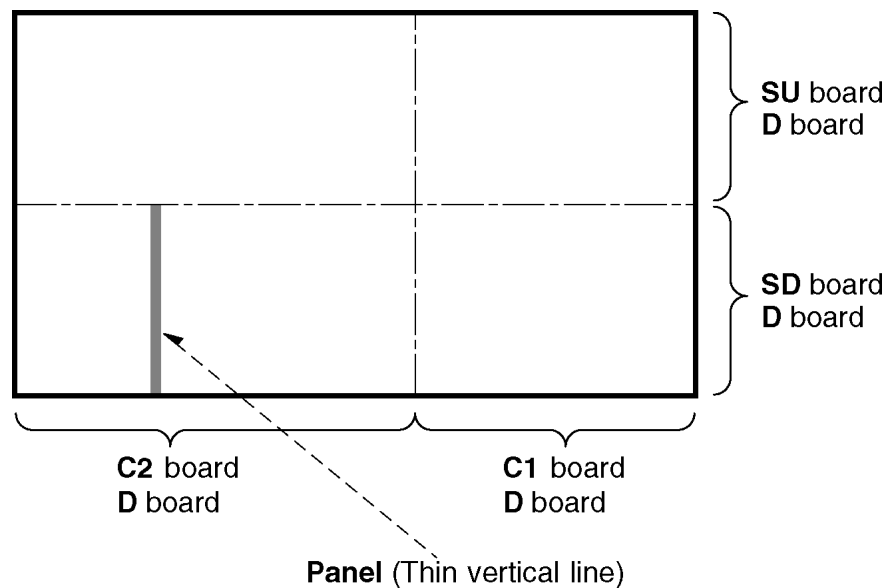
D6769 (RED)
(15V detection)
D6765 (RED)
(SOS)

8.3. No Picture



8.4. Local screen failure

Plasma display may have local area failure on the screen. Fig - 1 is the possible defect P.C.Board for each local area.



<Local screen failure chart>

Fig - 1

9 Service Mode Function

MPU controls the functions switching for each IICs through IIC bus in this chassis. The following setting and adjustment can be adjusted by remote control in Service Mode.

9.1. How to enter SERVICE 1

1. In sound menu, set BASS to MAXIMUM, and set TREBLE to MINIMUM.
2. Simultaneously press **INDEX** button on remote control and **DOWN** button [$\text{---}/\text{V}$] on the TV set.

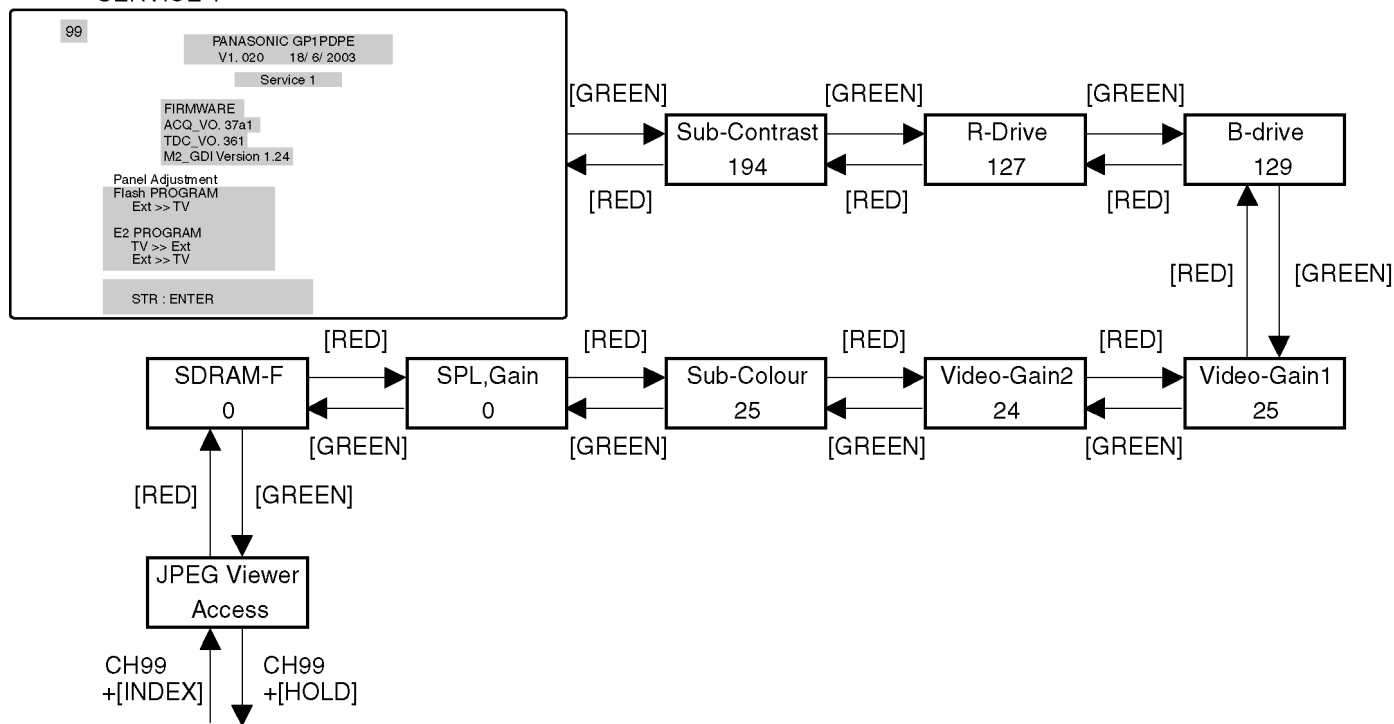
9.2. How to enter SERVICE 2

1. Set the channel to CH99.
2. Select the JPEG Viewer.
3. Press HOLD button on remote control.

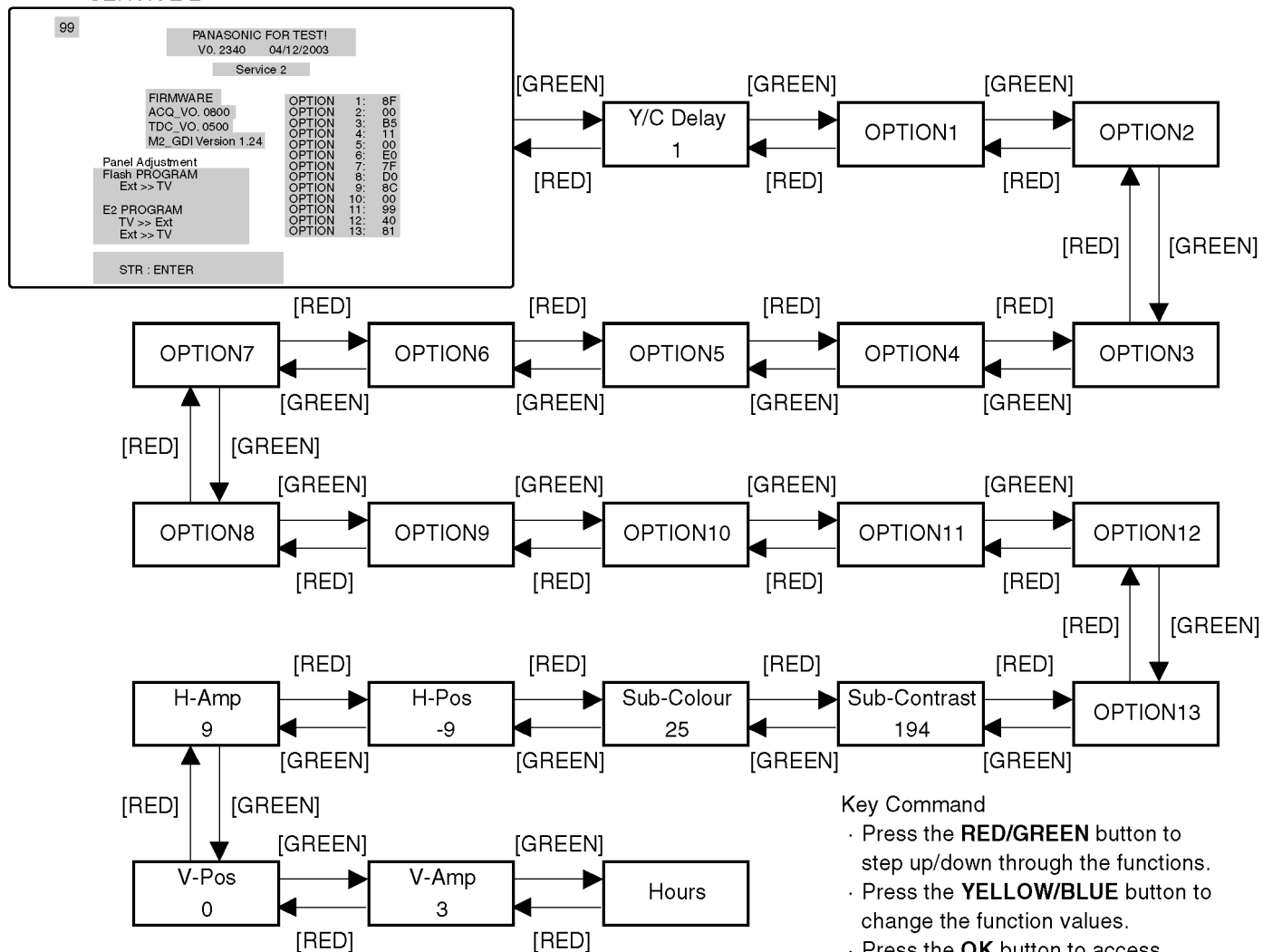
Note:

To exit to Service mode, press N or Power button on remote control.

SERVICE 1



SERVICE 2



Key Command

- Press the **RED/GREEN** button to step up/down through the functions.
- Press the **YELLOW/BLUE** button to change the function values.
- Press the **OK** button to access the CAT mode.

9.3. Option Description

option1		81		
b0	1	Colour system	Auto(1)	
b1	0		SECAM(1)	
b2	0		NTSC(1)	
b3	0		M.NTSC(1)	
b4	0	3:2 pulldown	enable (1)	
b5	0	YUV for MW	enable (1)	
b6	0	free		
b7	1	3D-COMB in the menu	Setup menu (0), Picture menu (1)	
option2		00		
b0	0	(CH Plan)	ASIA/M.E/HK/UK/CHINA (1)	
b1	0		NZ/INDNES (1)	
b2	0		AUSTRALIA (1)	
b3	0		E. EUROPE (1)	
b4	0		SPECIAL (1)	
b5	0		AMERICA (1)	
b6	0		CATV (1)	
b7	0		JAPAN (1)	
option3		35		
b0	1	sub picture	without sub-picture (0), with sub-picture (1)	
b1	0	2tuner	2 tuner (1), 1 tuner (0)	
b2	1	VGA	enable (1)	
b3	0	AV5	enable (1)	
b4	1	Wide (16:9)	16:9 (1), 4:3 (0) (change multi window/aspect operation	
b5	1	JPEG	enable (1)	
b6	0	SIF	I only(0), BG only(1)	
b7	0		I/BG/DK/L(2), BG/DK(3)	
option4		10		
b0	0	A2 enable	enable(1)	
b1	0		not use	
b2	0		not use	
b3	0		not use	
b4	1	NICAM enable	enable(1)	
b5	0		not use	
b6	0		not use	
b7	0		not use	
option5		00		
b0	0	(A2 select 6.5MHz)	5,742MHz (0), 6,742MHz	
b1	0	(NICAM priority)	ASIA/M.E. (1)	
b2	0		HK/UK (1)	
b3	0		CHINA (1)	
b4	0		NZ/INDN (1)	
b5	0		AUSTRA (1)	
b6	0		E. EURO (1)	
b7	0		SPECIAL (1)	
option6		A0		
b0	0	Ext HV input	without HV input (0) / with HV input (1)	
b1	0	SASO enable	SASO enable (1)	
b2	0	Noise mute	Noise mute enable (0)	
b3	0	Monitor out AV1 mute	Monitor out AV1 mute (1)	
b4	0	Tuner no refresh	Refresh tuner (0), no refresh (1)	
b5	1	Tuner	MACO tuner (1), Others (0)	
b6	0	HYPERS	UHF only (0), UHF/VHF (1)	
b7	1	IF I2C	I2C controlled Tuner IF module (1)	
option7		04		
b0	0	Power up EC-Mode	Power on EC enable (1)	
b1	0	CH Blanking	Blanking enable (1)	
b2	1	AV Blanking	Blanking enable (1)	
b3	0	Auto WIDE	always enable (1)	
b4	0	Volume correction	TV Volume correction enable (1)	
b5	0	AVLink	Q-Link on/off selectable in menu (1)	
b6	0	MPX/NICAM display	Display NICAM (0), Display MPX (1)	
b7	0	Owner ID	not use	

option8		40	
b0	0	Teletext CH Refresh	not use
b1	0	Geomagnetic Sensor	Geomagnetic sensor enable (1)
b2	0	Geomagnetic Polarity	Geomagnetic polarity +(0), -(1)
b3	0	RF Attenuation	Enable (1)
b4	0	Fine tuning	Enable (1)
b5	0	Search speed	Slow (1) Fast (0)
b6	1	TEXT	Enable (1)
b7	0	TEXT TOP	TOP enable (1)
option9		8C	
b0	0	Dolby	Dolby enable (1)
b1	0	3D Subwoofer	Subwoofer enable (1) Dolby model should be 0.
b2	1	Dolby Virtual	Dolby Virtual enable (1)
b3	1	Amp	with Amp (0) / without Amp (1)
b4	0	Sound Ext. DA	without Sound Ext. DA (0) / with Sound Ext. DA (1)
b5	0	Shipping Sound menu	MUSIC (0) / CINEMA (1)
b6	0	Volume curve	Volume curve1(0), curve2(1)
b7	1	LIP SYNC	LIP SYNC enable (1)
option10		00	
b0	0	OSD language	not used
b1	0	ACI all country	ACI enable (1), only Netherland (0)
b2	0	ACI auto MP	ACI auto multi package enable (1)
b3	0	ACI offset	ACI offset for VCR prog, enable (1)
b4	0	Blue Back	not used
b5	0	Aspect Auto	Reserved
b6	0	S1/S1 Detection	Reserved
b7	0	Protect 5V detect	Protection input enable (1)
option11		11	
b0	1	Acuity Demo	enable (1)
b1	0	Picture Shift	enable (1)
b2	0	Shop mode	enable (1)
b3	0	User aspect Just	enable (1)
b4	1	User aspect 14:9	enable (1)
b5	0	NICAM C4 bit	enable (1)
b6	0	ID-1	enable (1)
b7	0	1080i	enable (1)
option12		48	Area Option
b0	0	Asia	Asia (1), Europe (0)
b1	0	Australia	not used
b2	0	Ireland/India	Ireland (1)
b3	1	UK	UK (1)
b4	0	MELCOA	not used
b5	0	28 inch	28 inch (1) when only large size = 0, Wide = 1, PTV = 0
b6	1	Large size	52 (1) / 42 (0) for PTV, 36 (1) / 32 (0) for Wide, 34 (1) / 29 (0) for 4:3
b7	0	free	
option13		85	Temporaly
b0	1		
b1	0	UK Tuner IF (38.9MHz (0), 39.5MHz (1))	set to 1
b2	1	New ALBD	set to 0
b3	0		
b4	0		
b5	0	TEXT mode initialize	enable (1), disable when TV (0)
b6	0		
b7	1	Black-level correction	enable : GC2S+ IAJ0_YOS control (1)

10 CAT (Computer Aided Test) mode

CAT mode menu

CAT Panel sys8.2		
IIC Mode	←.....	Mode
CD Mode	←.....	IIC
SD Mode	←.....	Function
MS Mode	←.....	Service Alignment
ID Mode	←.....	Access button
		OK
		CD(Complete
		Diagnostics)
		Software version
		information EEPROM edit
		Mute
		more than 5 seconds
		SD(Status
		Display)
		MTBF parameter
		OK
		MS Mode
		Not use

		ID
		Not use

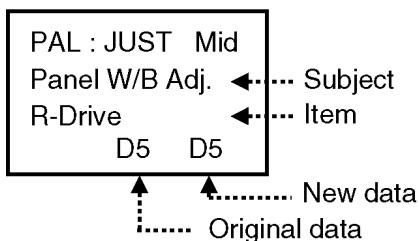
How to access the CAT mode.

1. Enter the service mode.
2. Press the OK button on the remote control.

10.1. IIC mode

Select the IIC mode by **Up/Down (Channel) button** on the remote control at the front page of CAT mode then press the **OK button** on the remote control.

OSD



How to use the IIC mode.

1. Select the alignment **Subject** by Cursor UP/DOWN **buttons** on the remote control.
2. Select the alignment **Item** by **Corsor L/R buttons** on the remote control.
3. Adjust **optimum setting** by **Volume Up/Down buttons** on the remote control.
4. The **data is memorized** when press the **N button** on the remote control or change the alignment Subject (or Item).

Subject and item are mentioned on IIC mode structure.

(Refer to item 10.4.)

To exit the IIC mode, press the **MENU button** on the remote control.

10.2. CD mode

Select the CD mode by **Up/Down (Channel) button** on the remote control at the front page of CAT mode then press the **Mute** (M) **button** on the remote control more than 5 sec.

OSD

MiCom Software version.	0.11	OK	Factory use
Memory data version D	0.11 1	8 63	
Memory data version H	21.05	78 3F	
Memory data change Address	0	0	New data
Data	0	0	
			Original data

Micom software version (IC1007), this version can be upgrade by replace of new version IC

Memory data change

Address	0	0	Change by Up/Down (Cursor) buttons on the remote control.
			Change by Left/Right (Cursor) buttons on the remote control.
Data	0	0	Change by VOL Up/Down buttons on the remote control.

The data is memorized when switch off the main power.

To exit the CD mode, press the **MENU button** on the remote control.

10.3. SD mode

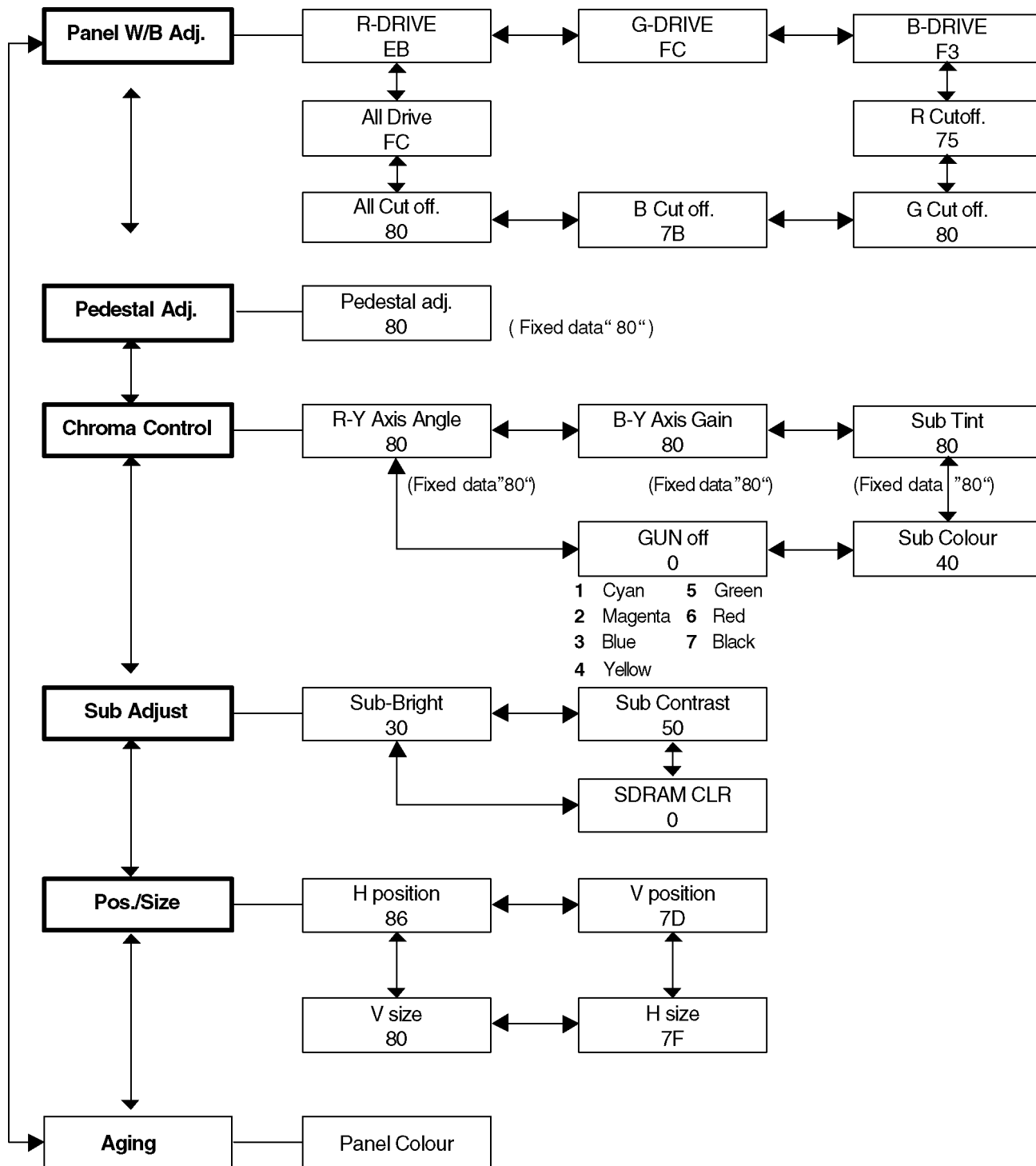
Select the SD mode by **Up/Down (Channel) button** on the remote control at the front page of CAT mode then press the **OK button** on the remote control.

OSD

Input command check	23 25 27 -- -- -- 27 27 27 -- -- -- -- 28 25 25 37		History of remote control command. (Factory use)		
Power Protect					
MTBF parameter	WT	72	PT	12	Cumulative Time for power on condition. (unit :hour) Counter of power on. (unit :time)
Remote Control mode	A		B		

To exit the SD mode, press the **MENU button** on the remote control.

10.4. IIC mode structure (following items value is sample data.)



- | | | |
|---------|--------------|----------|
| 0 WHITE | 3 BLUE | 6 RAMP_R |
| 1 RED | 4 SCROLL BAR | 7 RAMP_G |
| 2 GREEN | 5 RAMP_W | 8 RAMP_B |

These are selected by OK button of Remote control and to exit, press the MENU button.

exit : MENU button

11 Adjustment Procedure

11.1. +B Set-up

11.1.1. Item / Preparation

1. Input a Gray scale signal.
2. Set the picture controls: -
Picture mode: Normal
Colour balance: Normal

11.1.2. Adjustments

Adjust and confirm indicated test point for the specified voltage.

Adjust

Name	Volume	Voltage	Test Point	Remarks
Vsus	R605	170V $\pm$ 1V	P11 pin 2	P-Board
Vda	R590	67V $\pm$ 0.5V	P12 pin 1	P-Board

Confirm

Name	Voltage	Test Point	Remarks
15V	15.4V $\pm$ 0.5V	P23 pin 1	P23-3 (GND)
15V	15.2V $\pm$ 0.5V	P7 pin 1	P7-3 (GND)
12V	11.8V $\pm$ 0.5V	P25 pin 1	P25-3 (GND)
Audio+12V	12.5V $\pm$ 0.8V	P5 pin 7	P5-9 (GND)
5V	5.1V $\pm$ 0.3V	P25 pin 5	P25-6 (GND)
STB 5V	5.0V $\pm$ 0.3V	P27 pin 4	P27-9 (GND)
PFC	380V $\pm$ 15V	C468(+)	C468 (-) (GND)

11.2. Driver Set-up

11.2.1. Item / Preparation

1. Input an APL 100 % white signal.
2. Set the picture controls: -
Picture mode: Normal
Colour balance: Cool
Aspect: 16:9

11.2.2. Adjustments

Adjust driver section voltages referring the panel data on the panel data label.

Name	Test Point	Voltage	Volume	Remarks
Vsus	TPVSUS (SS)	170V $\pm$ 1V	R605 (P)	
Vbk	TPVBK (SC)	155V $\pm$ 5V	R6443 (SC)	
Ve	TPVE (SS)	158V $\pm$ 1V	R6774 (SS)	
Vset	TPVSET (SC)	218V $\pm$ 6V	---	
Vad	TPVAD (SC)	-90V $\pm$ 1V	R6477 (SC)	
Vscn	TPVSCN (SC)	Vad*+118V $\pm$ 2V	---	
Vda	TPVDA (SS)	67V $\pm$ 1V	R590 (P)	

*See the Panel label.

Panel Label information

Panel Label information form with the following fields:

- Serial No. []
- Ve: [] v, Vsus: [] v
- MADE IN JAPAN
- IQF []

Adjustment voltage

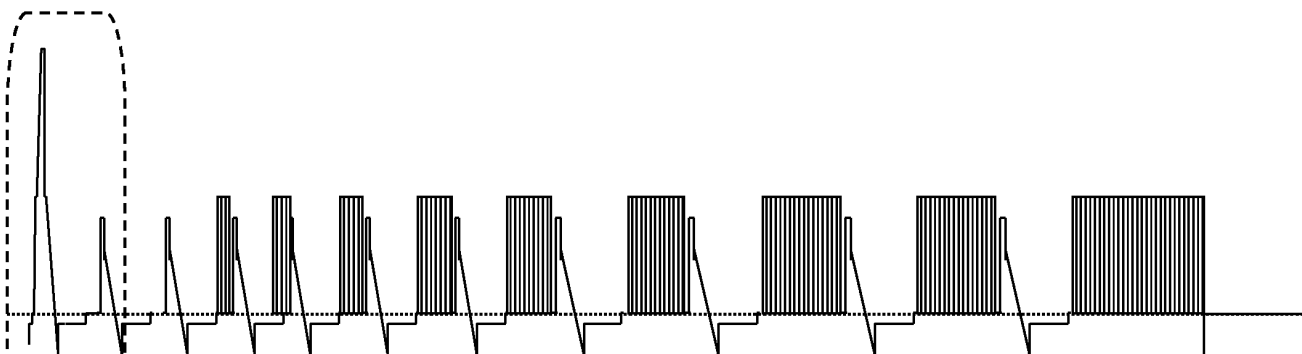
11.3. Initialization Pulse Adjust

1. Input a Cross hatch signal.
2. Set the picture controls: -
Picture mode: Normal
Colour balance: Cool

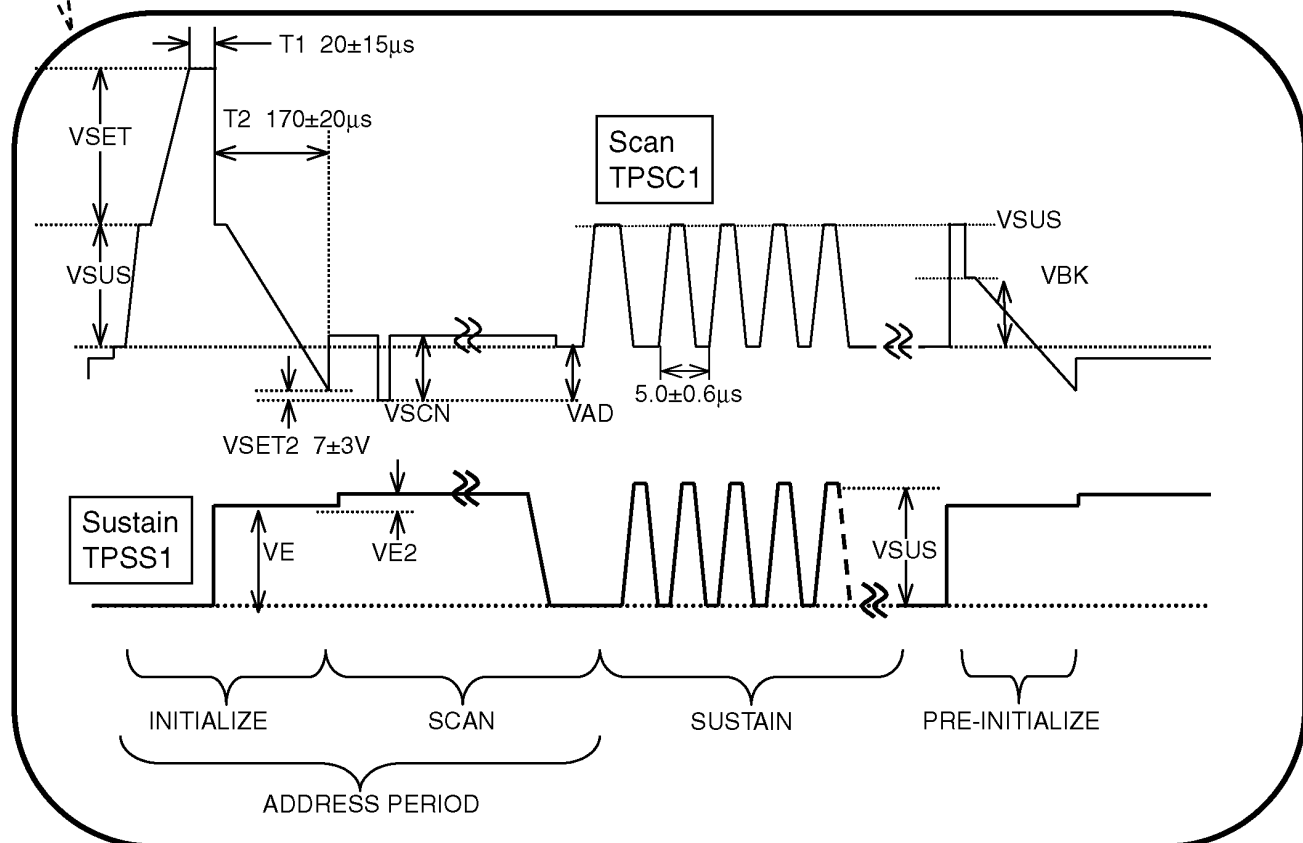
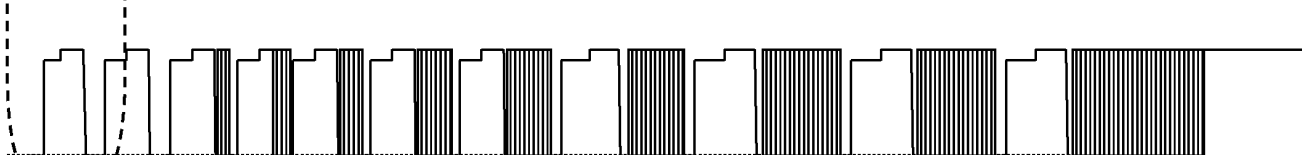
Adjust the indicated test point for the specified waveform falling period.

	Test point	Volume	Level
T1	TPSC1 (SC)	---	---
T2	TPSC1 (SC)	R6557 (SC)	$170 \pm 20\mu\text{Sec}$

TPSC1 SCAN OUTPUT



TPSS1 SUSTAIN OUTPUT



11.4. P.C.B. (Printed Circuit Board) exchange

11.4.1. Caution

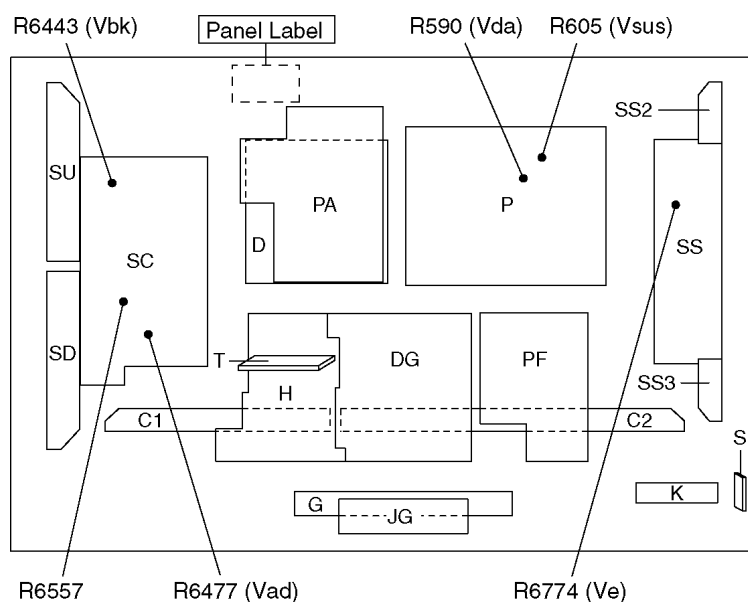
1. To remove P.C.B. , wait 1 minute after power was off for discharge from electrolysis capacitors.

11.4.2. Quick adjustment after P.C.B. exchange

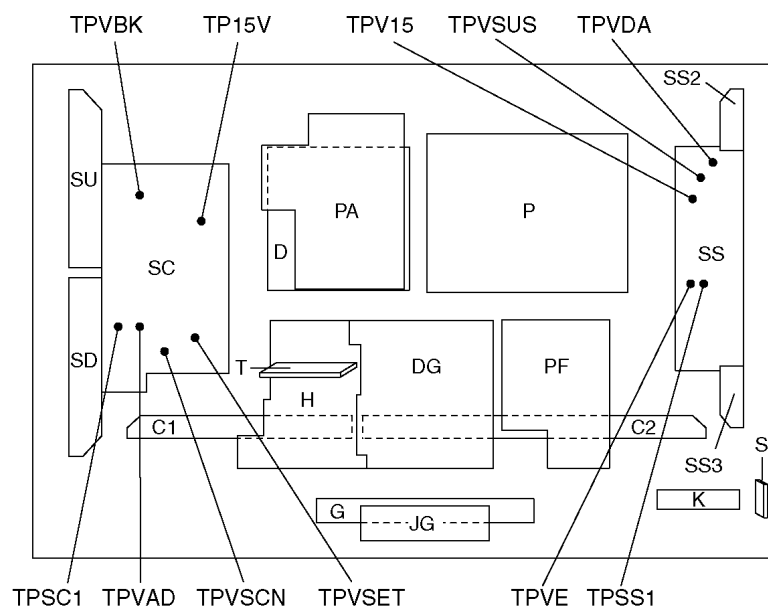
P.C.B.	Name	Test Point	Voltage	Volume	Remarks
P Board	Vsus	TPVSUS (SS)	170V $\pm$ 1V	R605 (P)	
	Vda	TPVDA (SS)	67V $\pm$ 1V	R590 (P)	
SC Board	Vbk	TPVBK (SC)	155V $\pm$ 5V	R6443 (SC)	
	Vad	TPVAD (SC)	-90V $\pm$ 1V	R6477 (SC)	
	Vset	TPVSET (SC)	218V $\pm$ 6V	- - -	
	Vscn	TPVSCN (SC)	Vad + 118 $\pm$ 2V	- - -	
SS Board	Ve	TPVE (SS)	158V $\pm$ 1V	R6774 (SS)	
D, DG Board	White balance, Pedestal and Sub brightness for NTSC, PAL, HD, PC and 625i signals				

*See the Panel label.

11.5. Adjustment Volume Location



11.6. Test Point Location

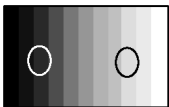


12 Alignment

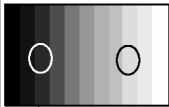
12.1. Pedestal setting

	INPUT	Equipment	Setting	Alignment menu	Procedure
1	RF Sub Bright Pattern 		Picture: Normal Colour balance: Cool Aspect: 16:9	PANEL W/B R cut off G cut off B cut off Chroma Control: Gun off RGB Sub Adjust: G Sub Bright 1 Chroma Control: Gun off RGB Sub Adjust: B Sub Bright 1 Chroma Control: Gun off RGB Sub Adjust: R Sub Bright 1	** Adjust at the dark room. 1) Set R,G and B cut off to "80". Set R, G and B drive to "F0". 2) Set Gun off to "5". (Only green pixels can emit.) 3) Adjust G Sub bright 1 to start some of green pixels emission at black 2% area and no emission at black 0% area. 4) Set Gun off to "3". (Only blue pixels can emit.) 5) Adjust B Sub bright 1 to start some of blue pixels emission at black 2% area and no emission at black 0% area. 6) Set Gun off to "6". (Only red pixels can emit.) 7) Adjust R Sub bright 1 to start some of red pixels emission at black 2% area and no emission at black 0% area.
2	HD Sub Bright Pattern 		Picture: Normal Colour balance: Cool Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change input to HD signal. 2) Repeat procedure 1) to 7) of Component input signal.

12.2. PAL panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure												
1	PAL White Balance Pattern 	Colour Analyzer	Picture: Normal Colour balance: Cool Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m₂ as Low light by colour sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m₂ exactly. 3) Set G cut off to " 80 ". 4) Adjust B and R cut off to set colour temperature as shown Fig.-01. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m₂. 6)Find 75% of white area by colour sensor.u 7) Set G Drive to " E0 ". 8) Adjust B and R Drive to set colour temperature as shown Fig.-01. 9) Repeat procedure 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 colour drive to "FC". 11) Re-adjust Low light level again. <table><tr><td>Colour Temp.</td><td>x</td><td>y</td></tr><tr><td>Cool(Hi)</td><td>0.276</td><td>0.276</td></tr><tr><td>Normal(Mid)</td><td>0.288</td><td>0.296</td></tr><tr><td>Warm(Low)</td><td>0.313</td><td>0.329</td></tr></table> Fig. -01	Colour Temp.	x	y	Cool(Hi)	0.276	0.276	Normal(Mid)	0.288	0.296	Warm(Low)	0.313	0.329
Colour Temp.	x		y														
Cool(Hi)	0.276		0.276														
Normal(Mid)	0.288	0.296															
Warm(Low)	0.313	0.329															
2			Picture: Normal Colour balance: Normal Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.												
3			Picture: Normal Colour balance: Warm Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.												
4			Picture: Normal Colour balance: Cool Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change colour templature to "Cool". 2)Re-set Sub bright to "30"												

12.3. PC panel white balance

	INPUT	Equipment	Setting	Alignment menu	Procedure												
1	PC White Balance Pattern 	Colour Analyzer	Picture: Normal Colour balance: Cool Aspect: 16:9	Sub Adjust Sub Bright PANEL W/B G cut off PANEL W/B B cut off R cut off Sub Adjust Sub Bright PANEL W/B G Drive PANEL W/B B Drive R Drive PANEL W/B R,G,B Drive R,G,B Drive PANEL W/B R,G,B cut off	1) Find the nearest area to brightness of 10 cd/m ² as Low light by colour sensor. 2) Adjust Sub bright to set Low light level to 10 cd/m ² exactly. 3) Set G cut off to " 80 " . 4) Adjust B and R cut off to set colour temperature as shown Fig.-02. 5) If Sub Bright is changed re-adjust it to set Low light to 10 cd/m ² . 6)Find 75% of white area by colour sensor. 7) Set G Drive to " E0 " . 8) Adjust B and R Drive to set colour temperature as shown Fig.-02. 9) Repeat item 4) to 7) to set both Low light and high light. 10) Increase same steps of R, G and B Drive to set largest level of 3 colour drive to "FC". 11) Re-adjust Low light level again. <table border="1"><tr><td>Colour Temp.</td><td>x</td><td>y</td></tr><tr><td>Cool(Hi)</td><td>0.276</td><td>0.276</td></tr><tr><td>Normal(Mid)</td><td>0.288</td><td>0.296</td></tr><tr><td>Warm(Low)</td><td>0.313</td><td>0.329</td></tr></table> Fig. -02	Colour Temp.	x	y	Cool(Hi)	0.276	0.276	Normal(Mid)	0.288	0.296	Warm(Low)	0.313	0.329
Colour Temp.	x	y															
Cool(Hi)	0.276	0.276															
Normal(Mid)	0.288	0.296															
Warm(Low)	0.313	0.329															
2			Picture: Normal Colour balance: Normal Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Normal". 2) Repeat procedure 3) to 11) of Cool mode.												
3			Picture: Normal Colour balance: Warm Aspect: 16:9	PANEL W/B R,G,B cut off PANEL W/B R,G,B Drive	1) Change white balance to "Warm". 2) Repeat procedure 3) to 11) of Cool mode.												
4			Picture: Normal Colour balance: Cool Aspect: 16:9	Picture Menu Sub Adjust Sub Bright	1) Change colour temprature to "Cool". 2)Re-set Sub bright to "30"												

12.4. Sub brightness setting

1	PAL Sub Bright Pattern 		Picture: Normal Aspect: 16:9	PANEL W/B All cut off	** Adjust at the dark room. Finish white balance adjustment 1) Set white balance to Cool . 2) Adjust All cut off to start some pixels emission at black 2% area and no emission at black 0% area. 3) Write down all cut off data. 4) Set white balance to Normal . 5) Adjust All cut off to set same data of Cool mode. 6) Set white balance to warm . 7) Adjust All cut off to set same data of Cool mode. 8) Change to PC signal. 9) Copy PAL All cut off data to PC mode.
	PC Sub Bright Pattern				

12.5. ABL Level

Instrument name	Connection	Remarks
1. HD Signal Generator (Color Bar Pattern) 2. Power meter (Connected to the inlet of Set)	COMPONENT INPUT	
Setting		
Perform aging for more than 30 minutes. Power-Supply voltage: 230V 50/60Hz (Distortion indicate 1%) Volume is MINIMUM; Screen size is MAXIMUM.		
Procedure		
1. Connect power meter to AC power. 2. Apply the colour bar pattern. 3. Select APL MULT among Panel APL/ABL in IIC mode. 4. Adjust APL MULT so that power consumption may Indicate following value. TH-37PA30E 239 ± 10W TH-42PA30E 307 ± 10W		Initialization : 1C Power is in inverse Proportion to data. (Reduce data when increase power.) Increase (↑) : 1C→1F Decrease (↓) : 1C→1A

13 Hotel mode

1. Purpose

Restrict a function for hotels.

2. Access command

- Enter to the Service 2 Mode.
- Press Status button on remote control and entry to the EEPROM EDITOR Mode.
- Set the data of EEPROM(ADDRESS 160) to C0.

EEPROM Editor									
Address: 160 Data: 80									
100	FF	FF	FF	FF	FF	FF	FF	FF	FF
108	FF	FF	FF	FF	FF	FF	FF	FF	FF
110	FF	FF	FF	FF	FF	FF	FF	FF	FF
118	FF	FF	FF	FF	FF	FF	FF	FF	FF
120	FF	FF	FF	FF	FF	FF	FF	FF	FF
128	FF	FF	FF	FF	FF	FF	FF	FF	FF
130	FF	FF	FF	FF	FF	FF	FF	FF	FF
138	FF	FF	FF	FF	FF	FF	FF	FF	FF
140	FF	FF	FF	FF	FF	FF	FF	FF	FF
148	FF	FF	FF	FF	FF	FF	FF	FF	FF
150	FF	FF	FF	FF	FF	FF	FF	FF	FF
158	FF	FF	FF	FF	FF	FF	0D	10	00
160	80	00	80	64	80	00	00	FF	FF
168	FF	FF	FF	FF	FF	FF	FF	FF	FF
170	FF	0F	FF	FF	FF	FF	FF	FF	FF
178	FF	FF	FF	FF	FF	FF	FF	FF	FF

Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.

It can be made Hotel mode.

3. Exit command

- First, set the data of EEPROM(ADDRESS 160) to 80.
Next, Push the Power switch(button) off/on the set(the remote control) to turn the set off/on.
Then, it is no longer hotel mode.

4. Access command to the Hotel mode setup menu

- <Prerequisite> : It is conditions that the data of EEPROM(ADDRESS 160) is C0.

In order to display the Hotel mode setup menu, please enter the following command (**within 2 second**).

[TV]:down + [REMOTE]:TV/AV(3 times)

Then, the Hotel mode setup menu is displayed.

Hotel mode	
Initial INPUT	Off
Initial VOL level	Off
Maximum VOL level	100
Initial POS	Off
Button lock	Off
Remote lock	Off

5. Explain the Hotel mode setup menu

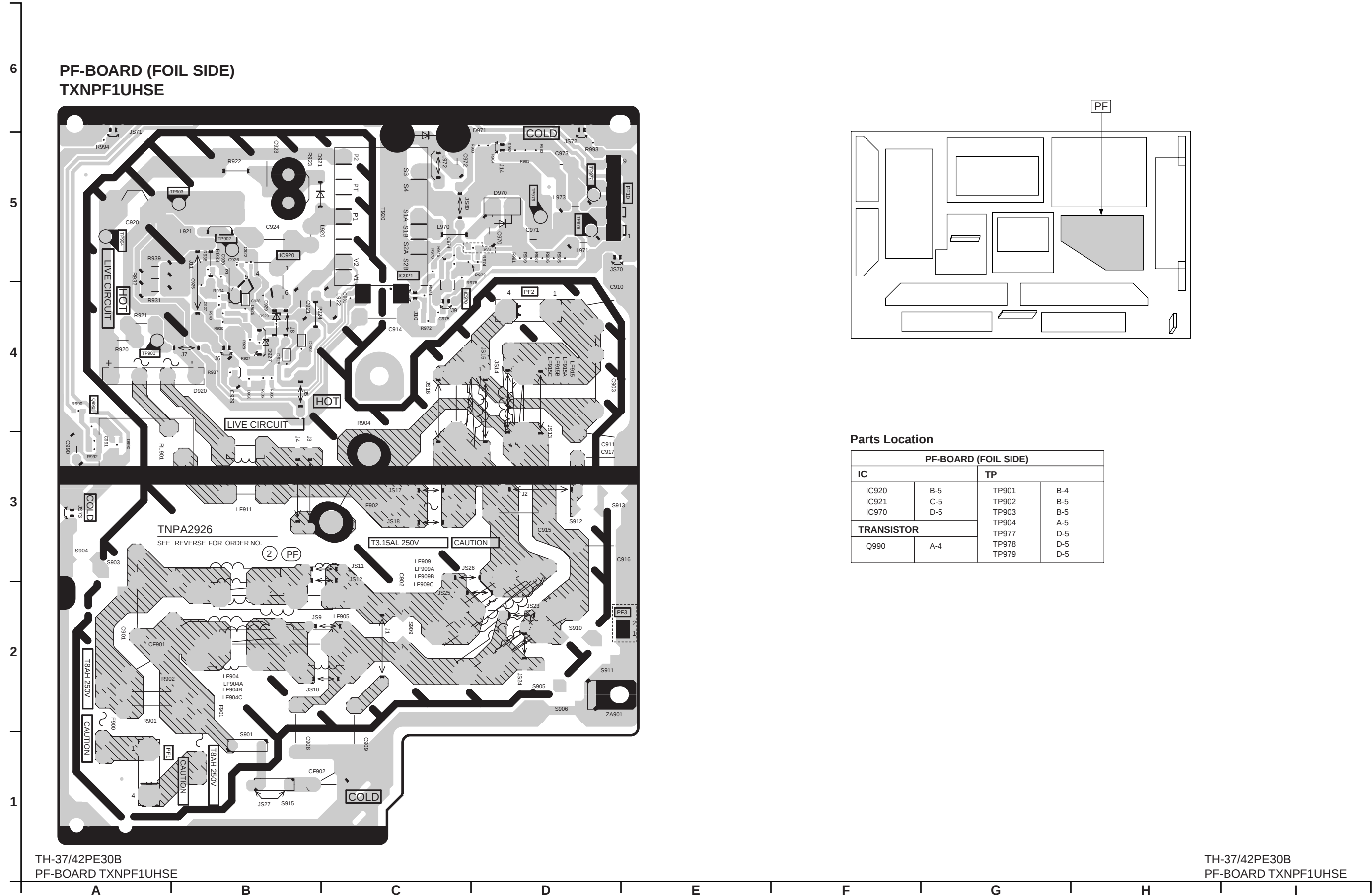
CAUTION

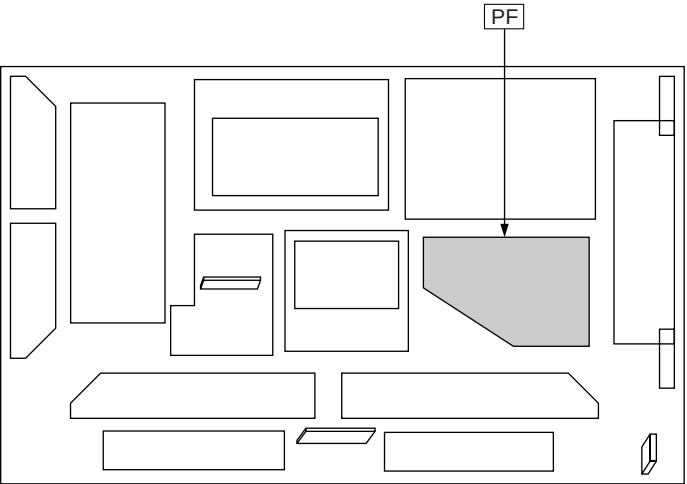
This setup is not valid, unless data of EEPROM(ADDRESS 160) will be C0, even if each settings were done.

item	Function
Initial INPUT	Select input signal modes. Set this signal, each time power is switched on. <Selection> : Off/TV/AV1/AV2S/AV3/AV3S/AV4/Av4S/AV4C/PC • Off: give priority to a last memory. However, Euro model is compulsorily set to TV. • AVnS/AVnC: only Euro model selectable • PC: selectable with VGA option
Initial VOL level	Adjust output Volume. Set this volume, each time power is switched on. If the value of InitVol is changed, volume will change. However, priority is given to a last memory when InitVol is Off. When "InitVol" is larger than "MaxVol", make "InitVol" and "MaxVol" the same. <Selection/Range> : Off/0 to 100 • Off: give priority to a last memory
Maximum VOL level	Adjust maximum volume. Set this max. volume, each time power is switched on. When "MaxVol" is smaller than "InitVol", make "MaxVol" and "InitVol" the same, if "InitVol" is not Off. <Range> : 0 to 100
Initial POS	Select programme number. Set this programme number, each time power is switched on. <Selection> : Off/0 to 99 (Euro model) • Off: give priority to a last memory
Button lock	Select local key conditions. Set this condition, each time power is switched on. <Selection> : Off/SETUPMENU/All • Off: altogether valid • SETUP: restrict F-key selection (Tuning guide(menu) can not be selected.) • MENU: restrict F-key selection (only Volume/Mute can be selected.) • All: altogether invalid.
Remote lock	Select remote control key conditions. Set this condition, each time power is switched on. <Selection> : Off/SETUP/MENU • Off: altogether valid • SETUP: only Setup menu is invalid • MENU: Picture/Sound/Setup menu are invalid

14 Conductor Views

14.1. PF-Board

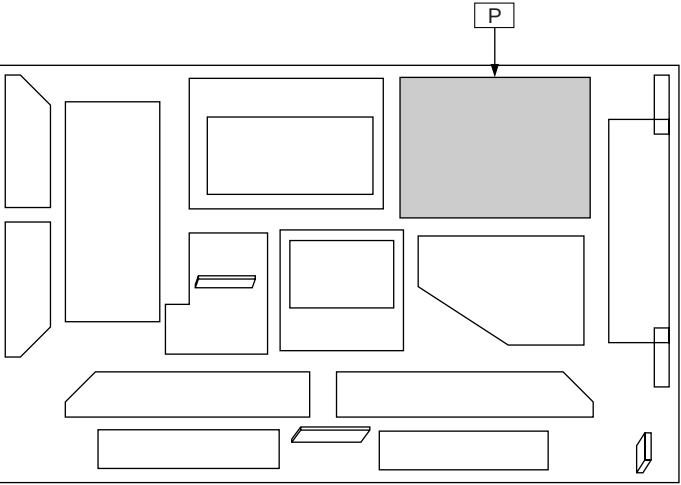
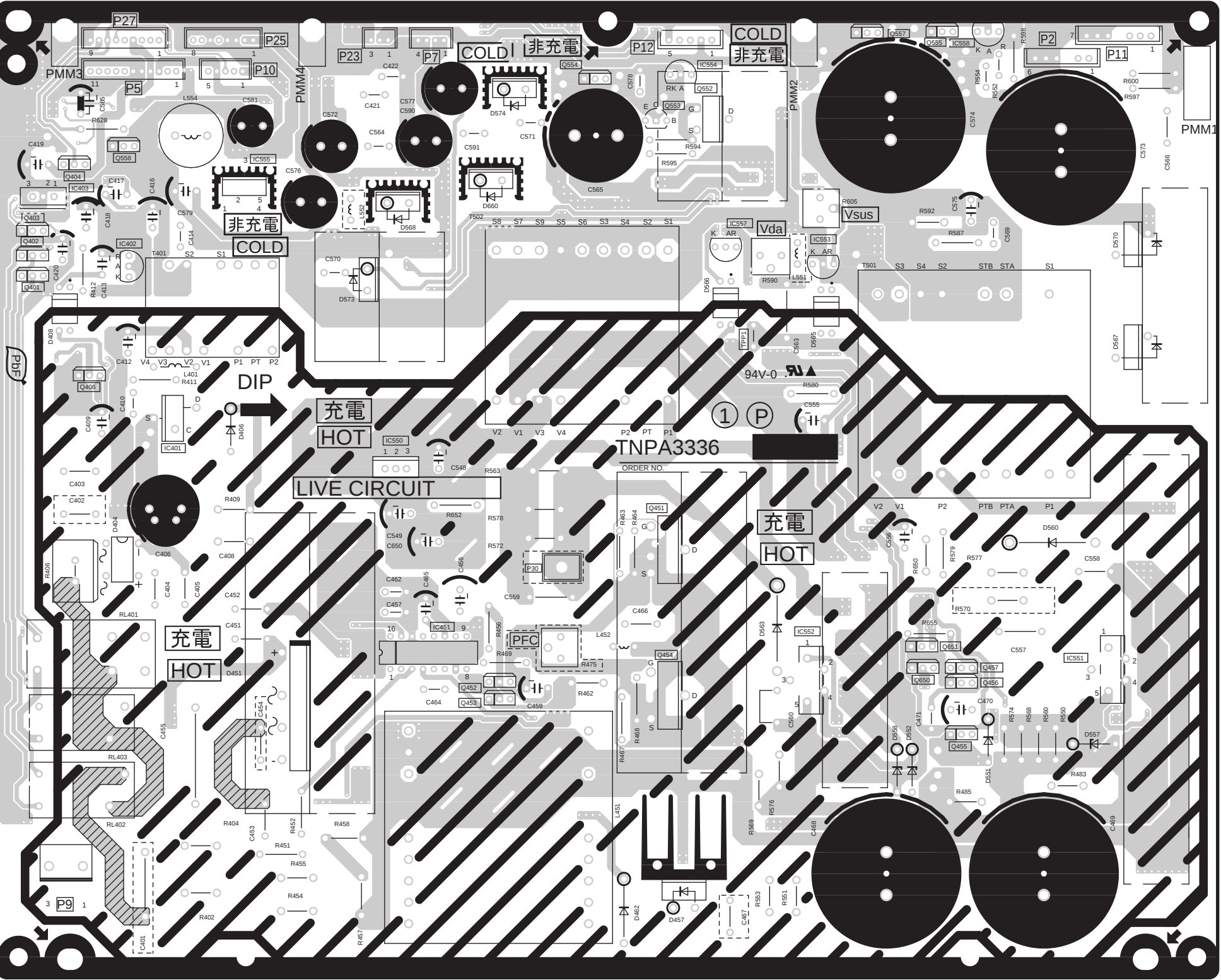


[illegible]

PF-BOARD (COMPONENT SIDE)			
IC			
IC920	C-5		
IC921	C-5		



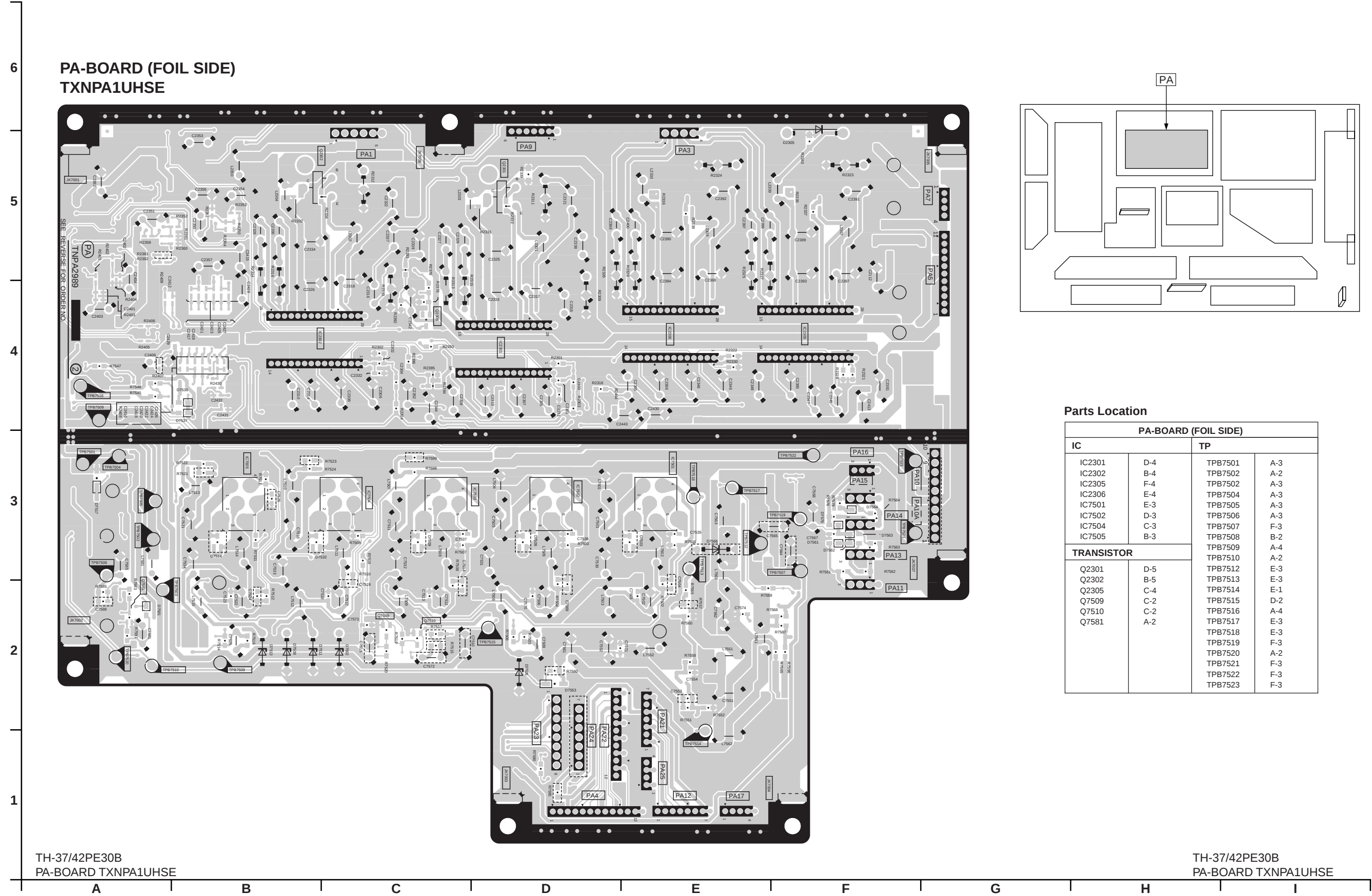
P-BOARD (COMPONENT SIDE)
TNPA3336



Parts Location

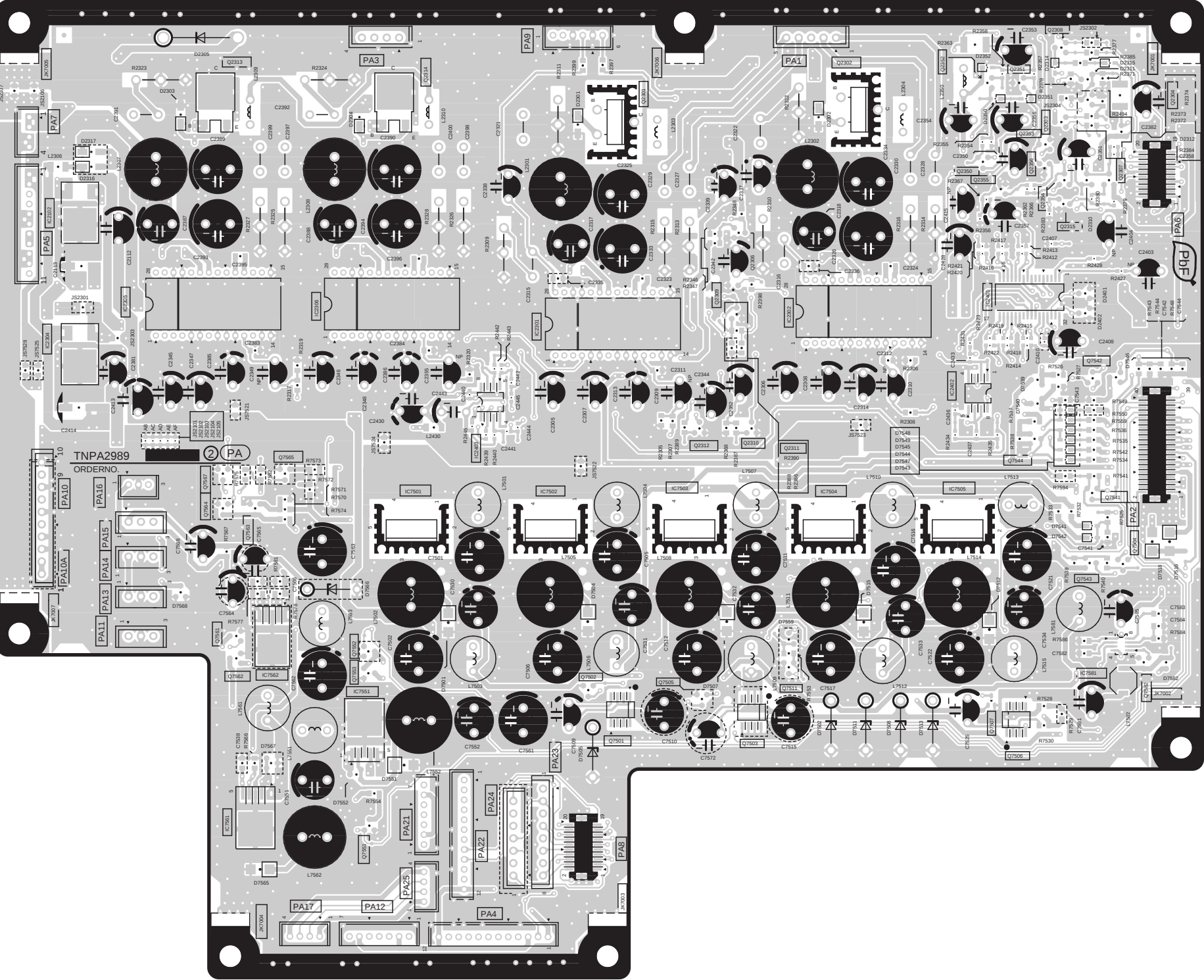
P-BOARD (COMPONENT SIDE)			
IC		TRANSISTOR	
IC401	B-4	Q401	A-4
IC402	A-5	Q402	A-5
IC403	A-5	Q403	A-5
IC451	C-3	Q404	A-5
IC550	C-4	Q406	A-4
IC551	F-2	Q451	D-3
IC552	E-3	Q452	C-2
IC553	E-5	Q453	C-2
IC554	D-6	Q454	D-2
IC555	B-5	Q455	F-2
IC557	E-5	Q456	F-2
IC558	F-6	Q457	F-2
		Q552	D-5
		Q553	D-5
		Q554	D-6
		Q555	F-6
		Q557	E-6
		Q558	A-5
		Q650	F-2
		Q651	F-2
		TPP1	E-4

14.3. PA-Board

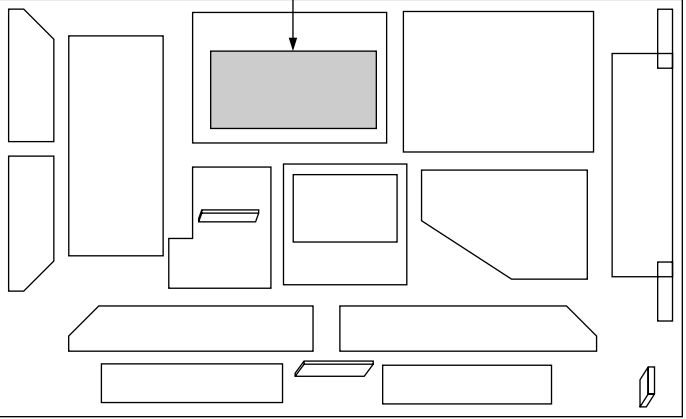


6
5
4
3
2
1

PA-BOARD (COMPONENT SIDE)
TXNPA1UHSE



PA

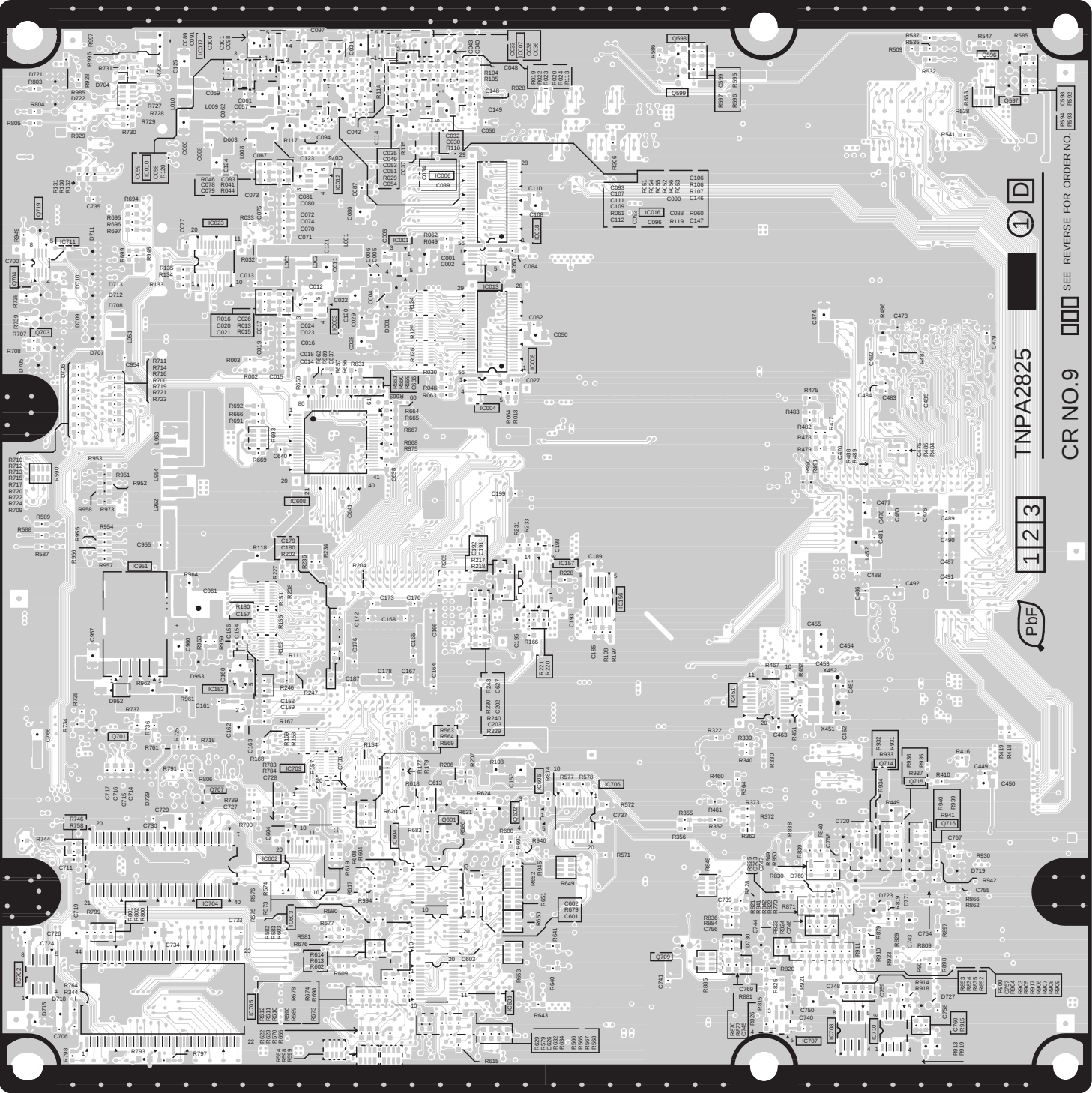


Parts Location

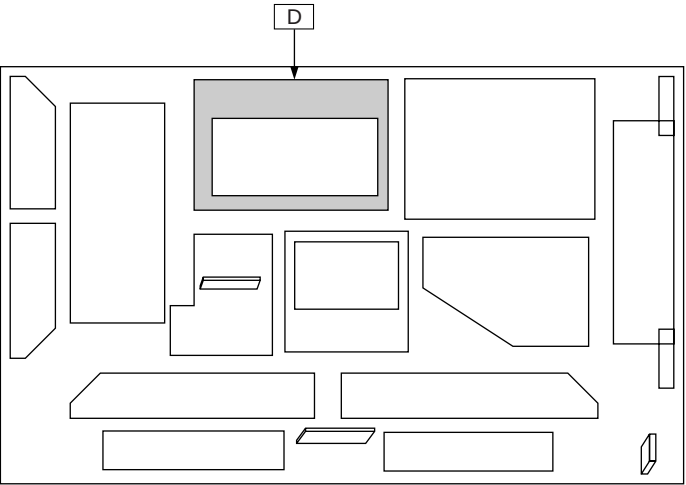
PA-BOARD (COMPONENT SIDE)					
IC			TP		
IC2102	A-5	Q2301	D-5	Q7501	D-2
IC2301	C-4	Q2302	E-5	Q7502	D-2
IC2302	E-4	Q2303	F-5	Q7503	E-2
IC2304	A-4	Q2304	G-5	Q7504	G-3
IC2305	A-4	Q2306	E-4	Q7505	D-2
IC2306	B-4	Q2307	F-5	Q7506	F-2
IC2401	F-4	Q2308	F-5	Q7507	F-2
IC2402	F-4	Q2309	D-4	Q7511	E-2
IC2403	C-3	Q2310	E-3	Q7532	B-2
IC7501	C-3	Q2311	E-3	Q7541	F-3
IC7502	D-3	Q2312	D-3	Q7542	F-4
IC7503	D-3	Q2313	B-5	Q7543	F-3
IC7504	E-3	Q2314	C-5	Q7544	F-3
IC7505	F-3	Q2315	F-5	Q7551	C-1
IC7551	C-2	Q2350	F-5	Q7552	C-2
IC7561	B-2	Q2351	F-5	Q7553	C-2
IC7562	B-2	Q2352	F-5	Q7561	B-2
IC7581	F-2	Q2353	F-5	Q7562	B-2
		Q2354	F-5	Q7563	B-3
		Q2355	F-5	Q7564	B-3
		Q2356	F-5	Q7567	B-3
				Q7582	G-2

14.4. D-Board

D-BOARD (FOIL SIDE)
TZTNP01UHSB



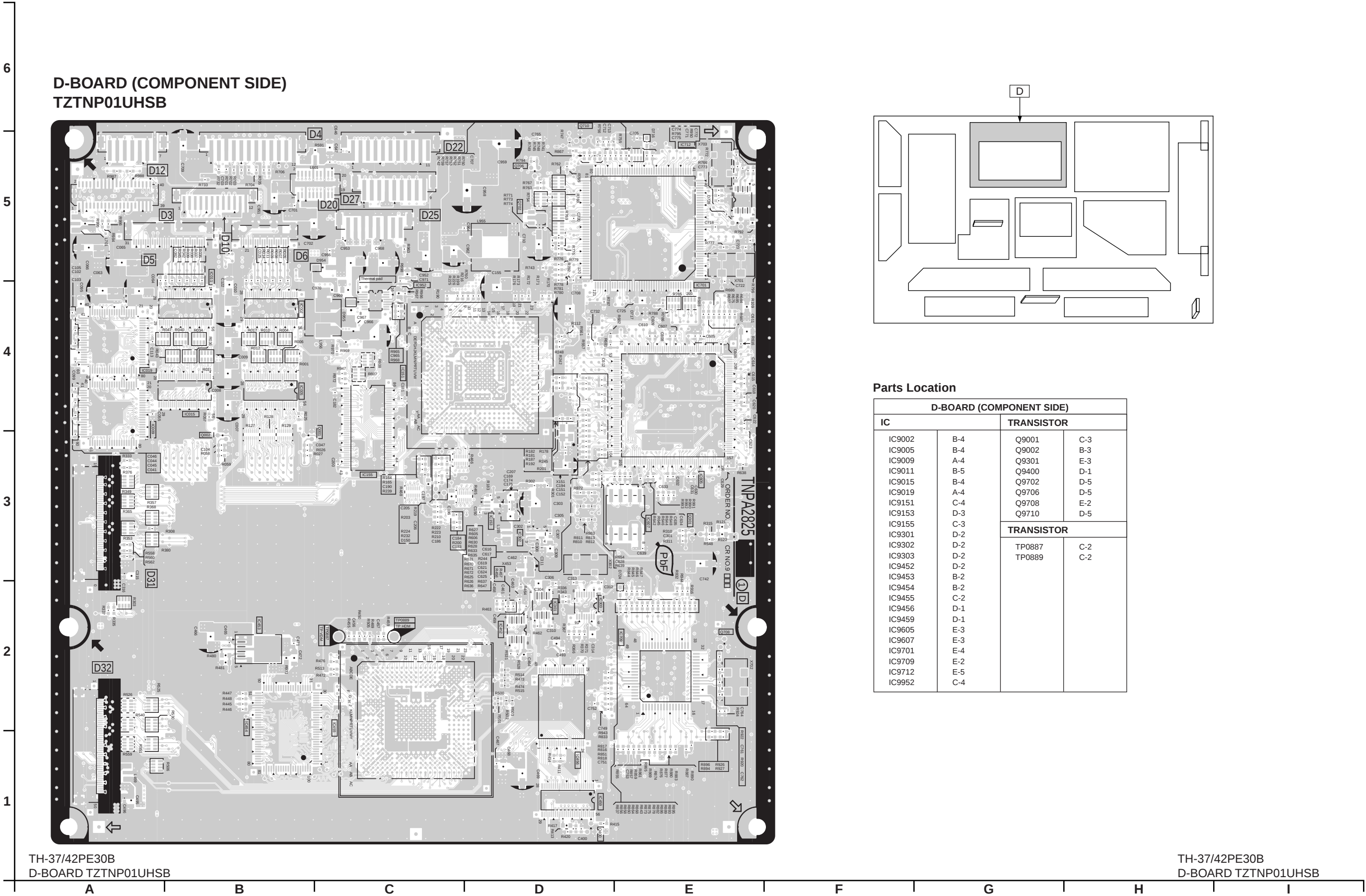
TH-37/42PE30B
D-BOARD TZTNP01UHSB

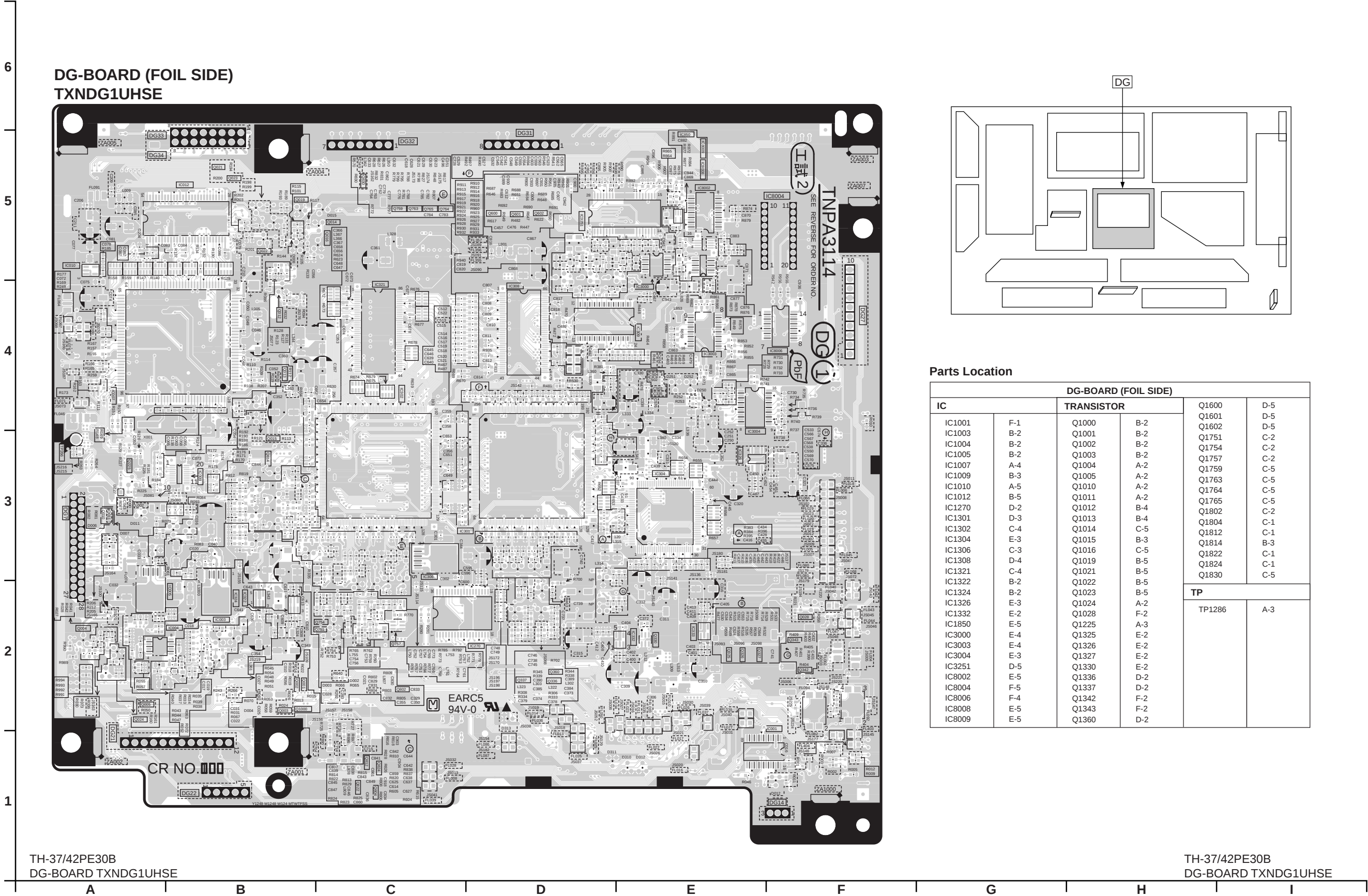


Parts Location

D-BOARD (FOIL SIDE)			
IC	TRANSISTOR		
IC9001	C-5	Q9596	E-5
IC9003	B-4	Q9597	E-5
IC9004	C-4	Q9598	D-5
IC9006	C-5	Q9599	D-5
IC9007	C-5	Q9601	C-2
IC9008	C-4	Q9602	C-2
IC9010	A-5	Q9701	A-2
IC9012	B-5	Q9703	A-4
IC9013	C-4	Q9704	A-4
IC9016	D-5	Q9707	B-2
IC9017	B-5	Q9709	D-1
IC9018	C-5	Q9714	E-2
IC9023	B-5	Q9715	E-2
IC9152	B-3	Q9716	E-2
IC9156	C-3	Q9719	A-5
IC9157	C-3		
IC9451	D-2		
IC9601	C-1		
IC9602	B-2		
IC9603	B-2		
IC9604	B-2		
IC9606	C-2		
IC9608	B-3		
IC9702	A-1		
IC9703	B-3		
IC9704	B-2		
IC9705	B-1		
IC9706	C-2		
IC9707	D-1		
IC9708	D-1		
IC9710	E-1		
IC9711	A-5		
IC9951	A-3		

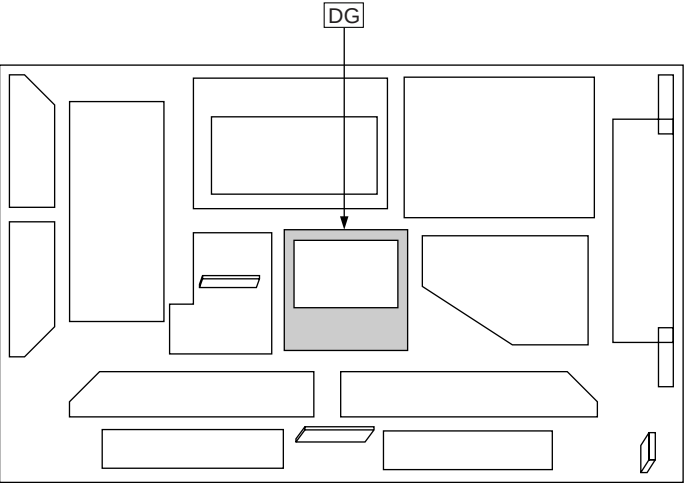
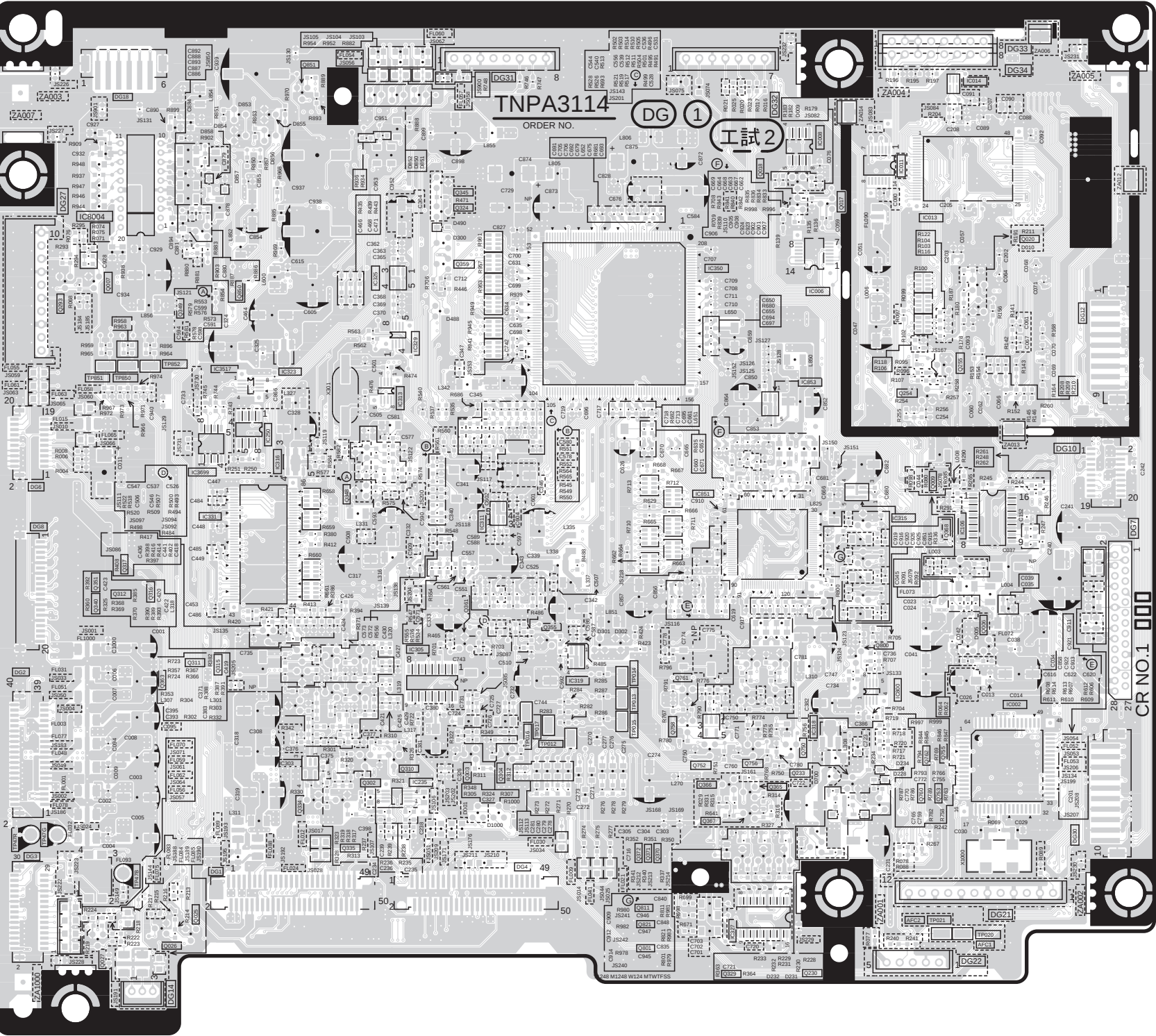
TH-37/42PE30B
D-BOARD TZTNP01UHSB





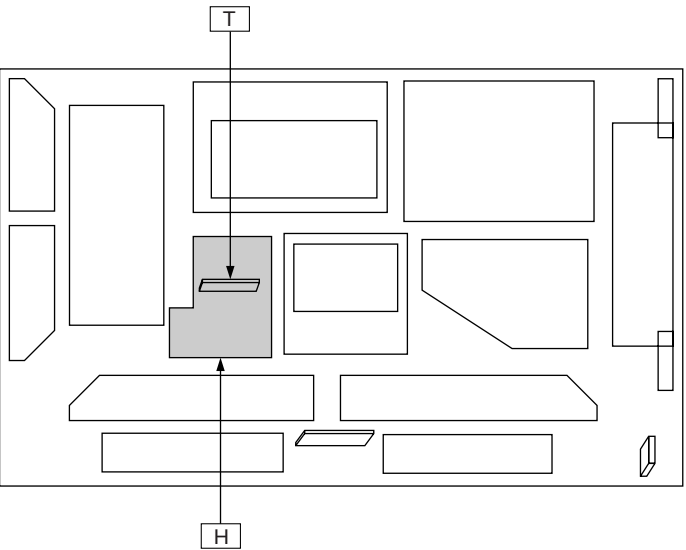
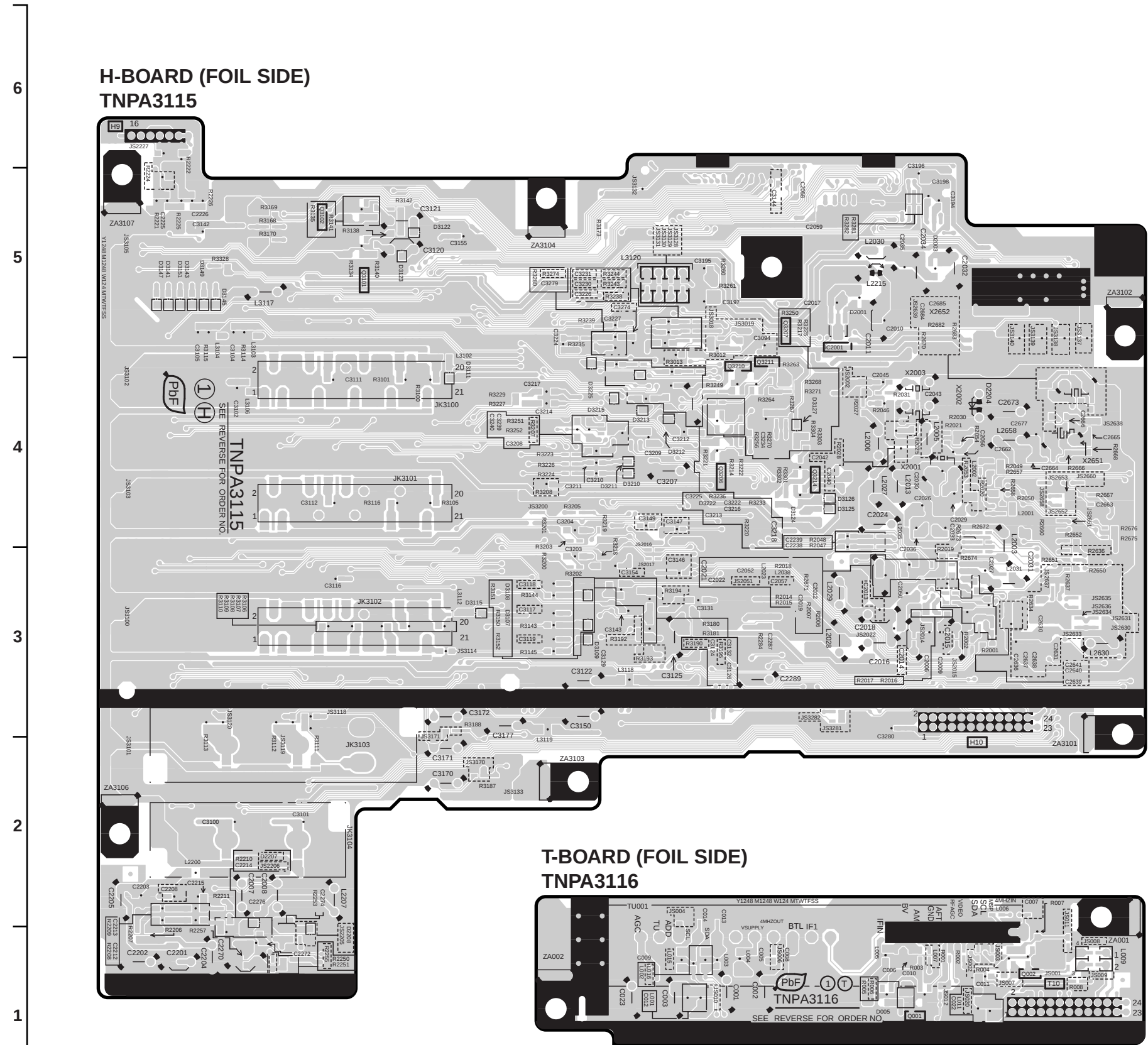
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DG-BRD (COMPONENT SIDE)
TXNDG1UHSE



Parts Location

DG-BRD (COMPONENT SIDE)					
IC		TRANSISTOR			
IC1002	F-2	Q1006	E-3	Q1363	B-2
IC1006	E-4	Q1007	A-4	Q1365	D-2
IC1008	E-5	Q1009	E-3	Q1366	D-2
IC1011	E-5	Q1017	E-5	Q1367	D-2
IC1013	E-5	Q1018	D-5	Q1368	E-3
IC1014	E-5	Q1020	F-4	Q1370	D-2
IC1106	E-3	Q1025	B-1	Q1371	D-2
IC1235	C-2	Q1026	B-1	Q1372	D-2
IC1250	B-4	Q1027	A-1	Q1750	E-2
IC1303	B-2	Q1230	E-1	Q1752	D-2
IC1305	C-3	Q1233	E-2	Q1753	E-2
IC1309	E-4	Q1254	E-4	Q1755	E-2
IC1311	C-3	Q1255	E-4	Q1756	D-2
IC1313	C-4	Q1293	A-4	Q1758	D-2
IC1315	E-3	Q1302	C-2	Q1760	E-2
IC1316	B-3	Q1303	C-2	Q1761	D-2
IC1318	E-2	Q1304	C-2	Q1762	E-2
IC1319	D-2	Q1310	C-2	Q1800	E-3
IC1323	B-4	Q1311	B-3	Q1801	D-1
IC1325	C-4	Q1312	A-3	Q1811	D-1
IC1327	D-1	Q1315	B-2	Q1821	D-1
IC1329	C-4	Q1316	A-3	Q1850	B-4
IC1331	B-3	Q1317	A-3	Q1851	B-5
IC1333	E-2	Q1324	C-5	TP	
IC1350	D-4	Q1329	D-1	TP1012	C-2
IC1750	D-2	Q1334	B-2	TP1013	D-2
IC1800	E-2	Q1335	B-2	TP1014	D-2
IC1851	D-3	Q1340	A-3	TP1015	D-2
IC1853	D-4	Q1345	C-5	TP1016	C-2
IC3517	B-4	Q1348	B-3	TP1850	A-4
IC3699	B-3	Q1349	B-4	TP1851	A-4
IC8004	A-5	Q1351	A-3	TP1852	B-4
		Q1355	C-3	TP47B	A-2
		Q1359	C-4	TP47G	A-2
		Q1361	C-3	TP47R	A-2



Parts Location

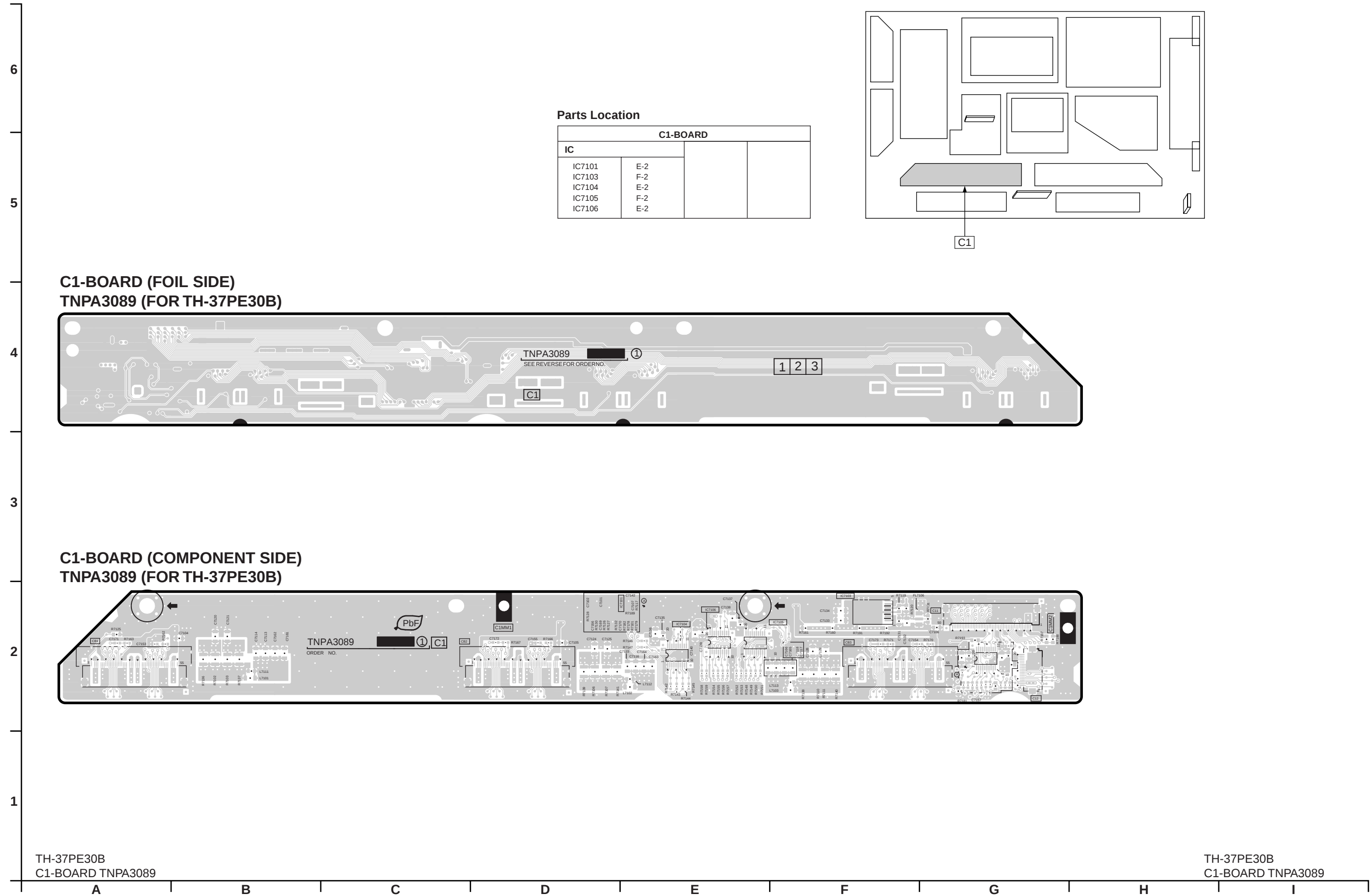
H-BOARD (FOIL SIDE)			
IC		TRANSISTOR	
IC2001	D-4	Q3101	B-5
		Q3102	B-5
		Q3206	D-4
		Q3207	D-4
		Q3210	D-4
		Q3211	D-4
		Q3214	D-4

Parts Location

T-BOARD (FOIL SIDE)			
TRANSISTOR			
Q001	E-1		
Q002	F-1		

TH-37/42PE30B
H-BOARD TNPA3115
T-BOARD TNPA3116

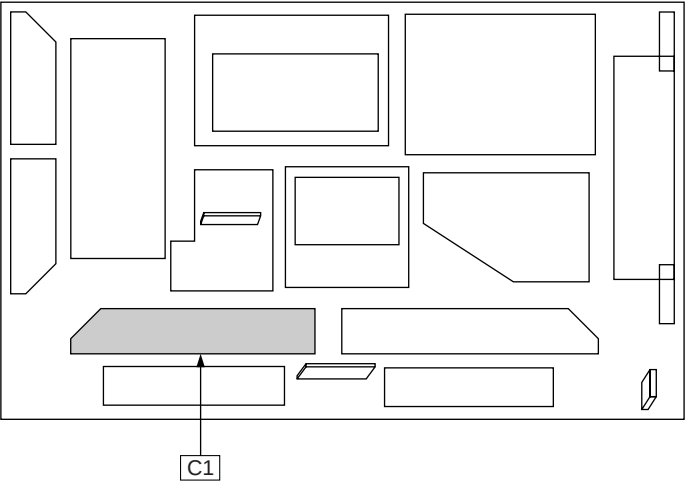
14.7. C1-Board (For TH-37PE30B)



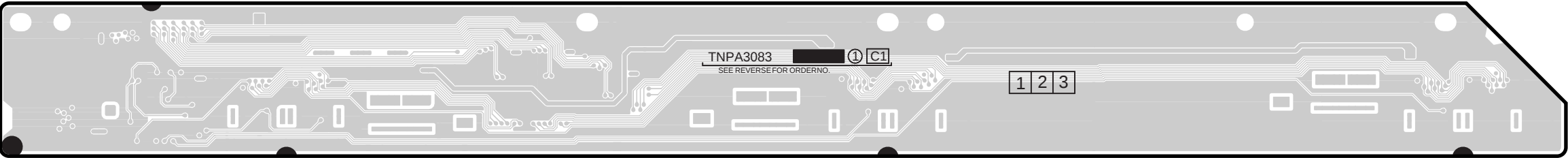
14.8. C1-Board (For TH-42PE30B)

Parts Location

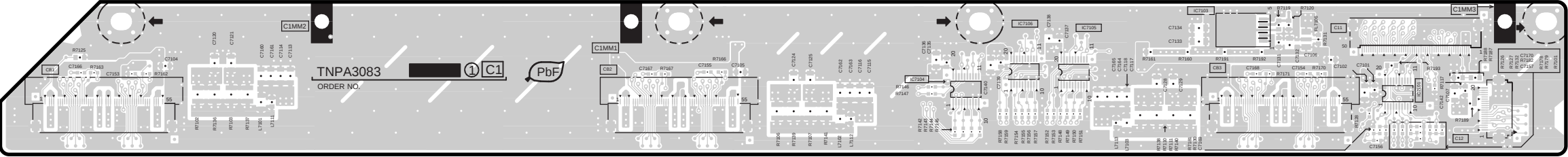
C1-BOARD			
IC			
IC7101	H-2		
IC7103	G-2		
IC7104	E-2		
IC7105	F-2		
IC7106	F-2		



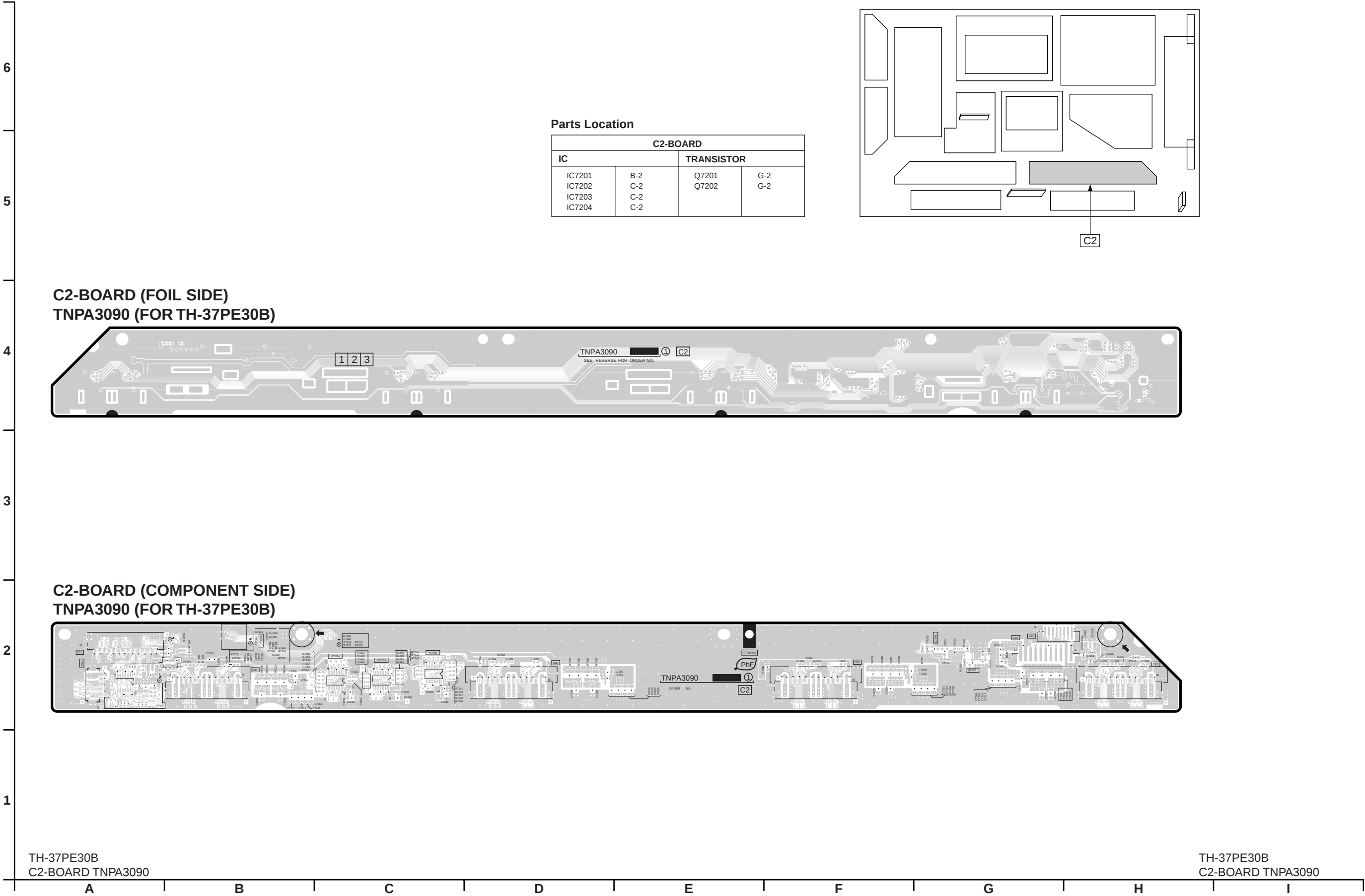
C1-BOARD (FOIL SIDE)
TNPA3083 (FOR TH-42PE30B)



C1-BOARD (COMPONENT SIDE)
TNPA3083 (FOR TH-42PE30B)



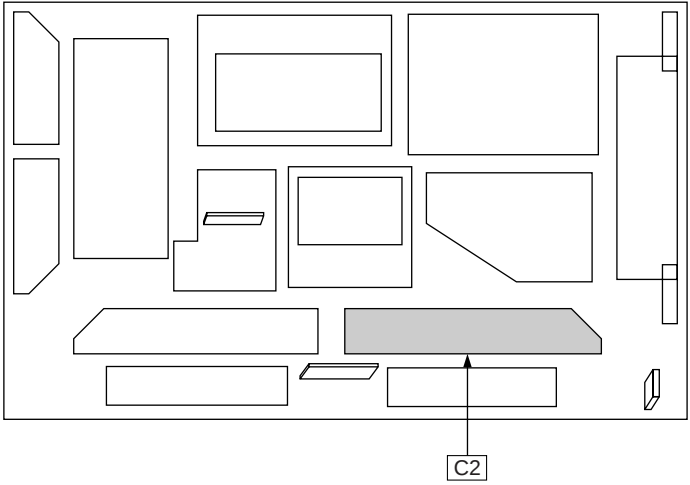
14.9. C2-Board (For TH-37PE30B)



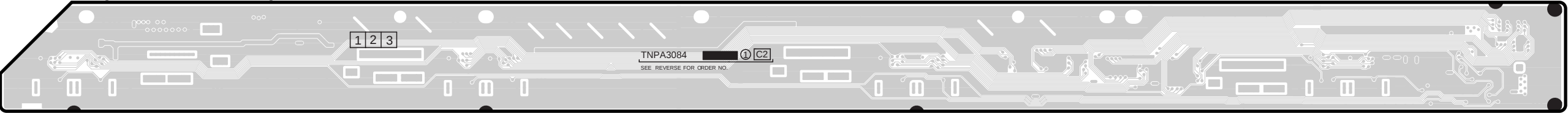
14.10. C2-Board (For TH-42PE30B)

Parts Location

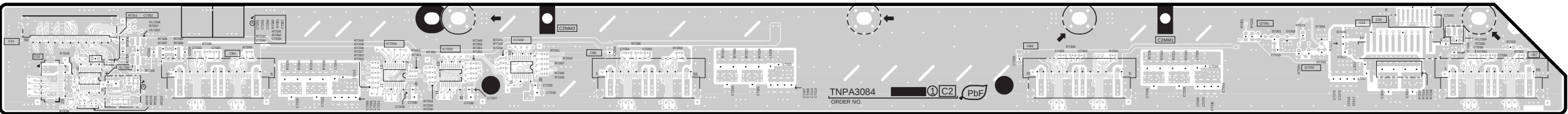
C2-BOARD			
IC		TRANSISTOR	
IC7201	A-2	Q7201	H-2
IC7202	D-2	Q7202	H-2
IC7203	C-2		
IC7204	C-2		



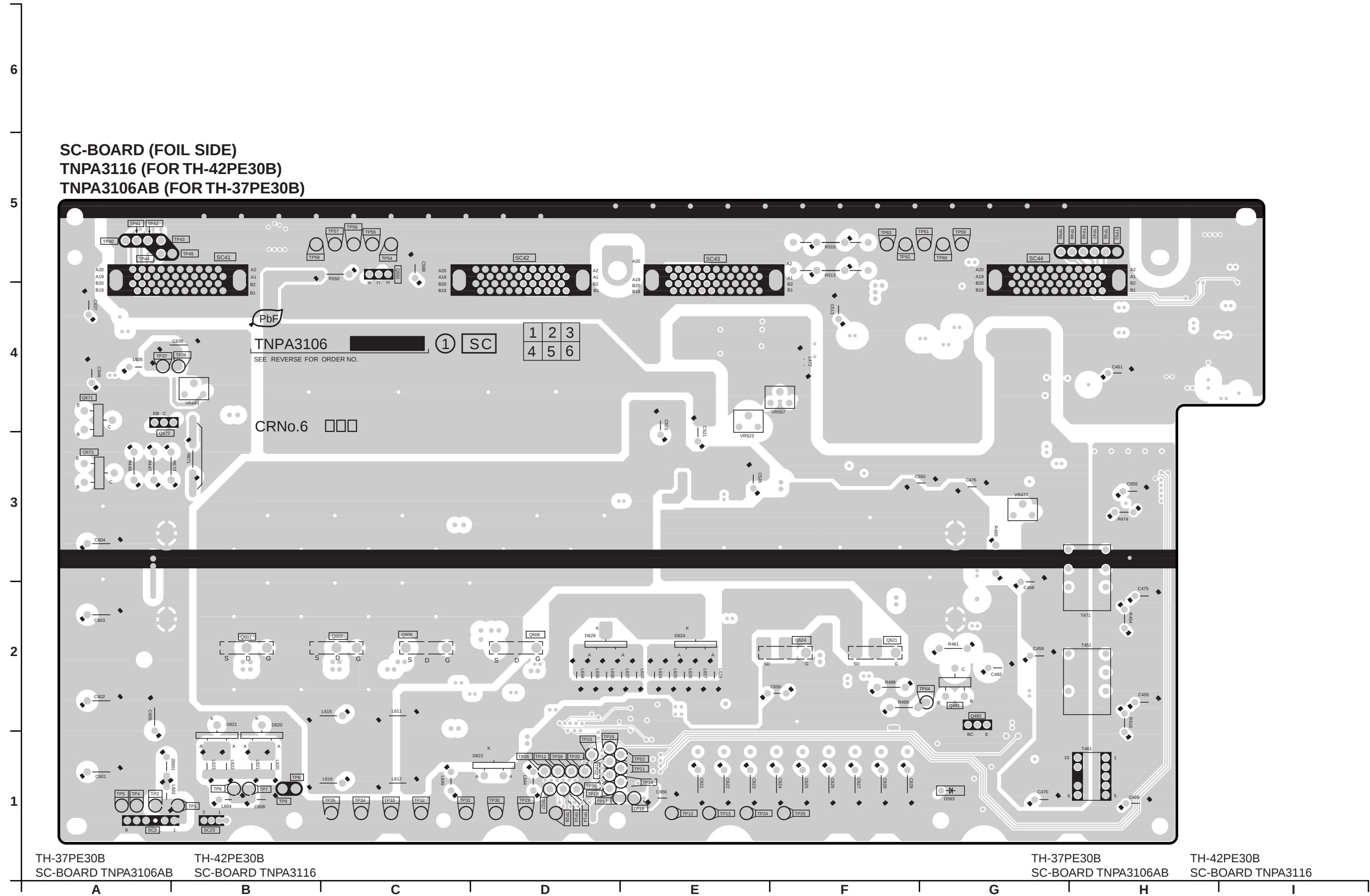
C2-BOARD (FOIL SIDE)
TNPA3084 (FOR TH-42PE30B)

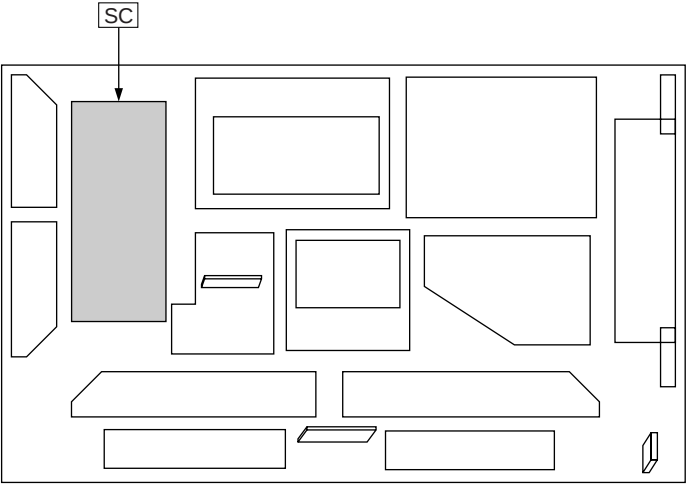


C2-BOARD (COMPONENT SIDE)
TNPA3084 (FOR TH-42PE30B)



14.11. SC-Board





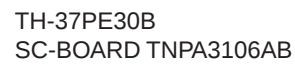
Parts Location

SC-BOARD (FOIL SIDE)					
TRANSISTOR		TP			
Q6491	G-2	TP6001	B-1	TP6033	C-1
Q6492	G-2	TP6002	A-1	TP6034	C-1
Q6550	C-5	TP6004	A-1	TP6035	C-1
Q6601	B-2	TP6005	A-1	TP6036	B-4
Q6602	C-2	TP6006	B-1	TP6037	A-4
Q6605	C-2	TP6007	B-1	TP6038	D-1
Q6606	D-2	TP6008	B-1	TP6039	D-1
Q6621	F-2	TP6009	B-1	TP6040	A-5
Q6624	F-2	TP6010	D-1	TP6041	A-5
Q6671	A-4	TP6011	D-1	TP6042	A-5
Q6672	A-4	TP6012	E-1	TP6043	B-5
Q6673	A-3	TP6013	E-1	TP6044	A-5
		TP6014	D-1	TP6045	B-5
		TP6015	D-1	TP6046	H-5
		TP6016	E-1	TP6047	H-5
		TP6017	D-1	TP6048	H-5
		TP6018	D-1	TP6049	H-5
		TP6019	E-1	TP6050	G-5
		TP6021	E-1	TP6051	G-5
		TP6022	D-1	TP6051	H-5
		TP6023	D-1	TP6052	E-1
		TP6024	E-1	TP6054	C-5
		TP6025	F-1	TP6055	C-5
		TP6026	D-1	TP6056	C-5
		TP6027	D-1	TP6057	C-5
		TP6028	D-1	TP6058	C-5
		TP6029	D-1	TP6060	G-5
		TP6030	D-1	TP6061	G-5
		TP6031	C-1	TP6062	F-5
		TP6032	C-1	TP6063	F-5
				TP6064	G-2

Parts Location

SC-BOARD (COMPONENT SIDE)					
IC		TRANSISTOR			
IC6434	B-2	Q6451	A-2	Q6549	G-4
IC6451	B-2	Q6452	A-2	Q6550	G-4
IC6452	B-2	Q6454	B-2	Q6551	D-3
IC6453	B-4	Q6455	A-2	Q6552	D-3
IC6454	B-4	Q6461	A-1	Q6553	C-4
IC6455	A-4	Q6462	A-1	Q6554	D-4
IC6456	B-2	Q6463	A-1	Q6555	B-3
IC6458	A-4	Q6471	A-3	Q6556	C-4
IC6467	C-2	Q6472	A-3	Q6581	C-1
IC6469	B-3	Q6474	B-3	Q6582	D-3
IC6471	B-3	Q6475	A-3	Q6601	G-2
IC6472	B-4	Q6476	B-4	Q6602	G-2
IC6474	B-3	Q6477	B-4	Q6603	E-2
IC6480	B-1	Q6491	C-2	Q6604	E-2
IC6491	C-1	Q6492	C-2	Q6605	F-2
IC6501	A-4	Q6501	C-4	Q6606	F-2
IC6502	A-4	Q6502	E-3	Q6611	F-2
IC6503	B-4	Q6503	D-4	Q6612	F-2
IC6504	B-4	Q6504	D-4	Q6613	F-2
IC6505	A-3	Q6511	C-5	Q6614	F-2
IC6506	C-3	Q6512	C-4	Q6621	C-2
IC6507	C-3	Q6520	D-3	Q6624	D-2
IC6508	C-3	Q6521	E-4	Q6641	H-4
IC6509	C-3	Q6522	E-3	Q6642	H-3
IC6510	B-3	Q6523	E-3	Q6671	H-4
IC6511	C-4	Q6524	F-3	Q6672	H-3
IC6512	E-3	Q6525	F-3	Q6673	H-3
IC6517	B-1	Q6526	F-3		
IC6521	E-3	Q6527	G-3		
IC6541	E-4	Q6528	G-3		
IC6542	C-4	Q6529	G-3		
IC6543	D-4	Q6530	E-3		
IC6581	C-1	Q6541	E-4		
IC6601	F-2	Q6542	E-4		
IC6602	D-2	Q6543	F-4		
IC6603	H-4	Q6544	F-4		
IC6604	H-4	Q6545	F-4		
IC6605	E-2	Q6546	F-4		
IC6606	E-1	Q6547	G-4		
IC6607	E-2	Q6548	G-4		

TP			
TP15V		H-1	
TPSC1		C-5	
TPVBK		H-4	
TPVSCN		C-3	
TPVSET		C-2	

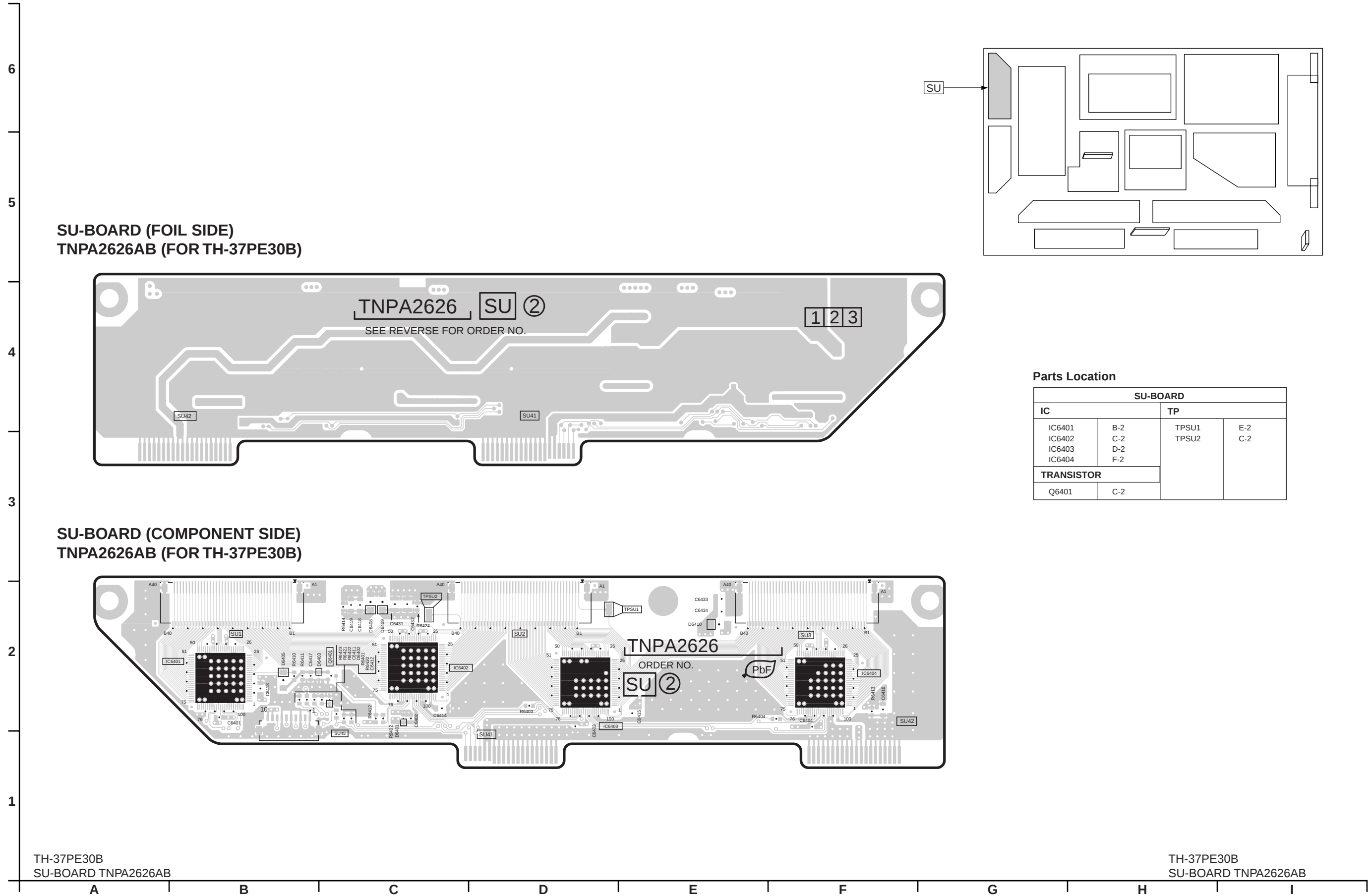


TH-42PE30B
SC-BOARD TNPA3116

TH-37PE30B
SC-BOARD TNPA3106AB

TH-42PE30B
SC-BOARD TNPA3116

14.12. SU-Board (For TH-37PE30B)



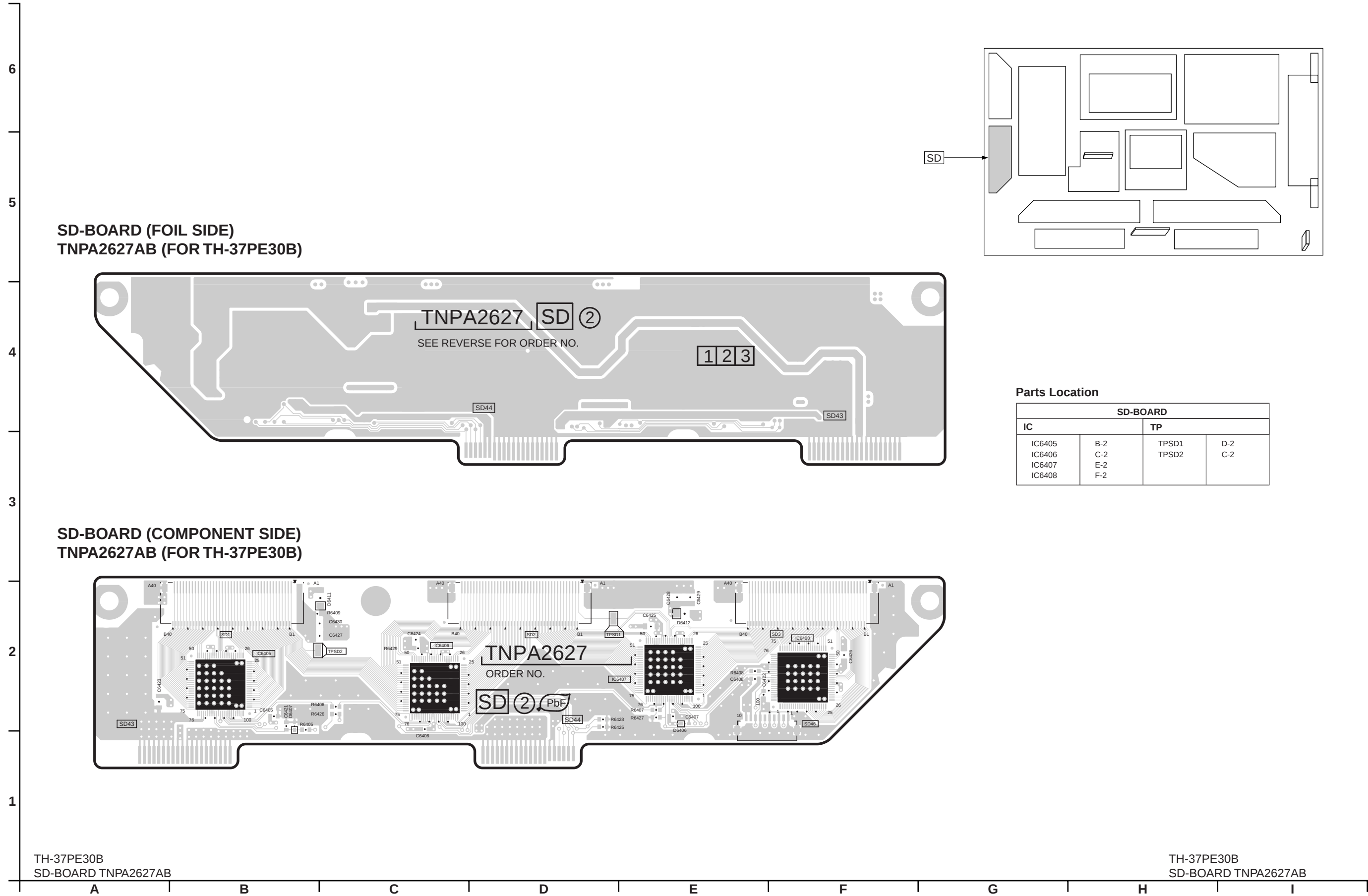
TH-37PE30B
SU-BOARD TNPA2626AB

TH-37PE30B
SU-BOARD TNPA2626AB

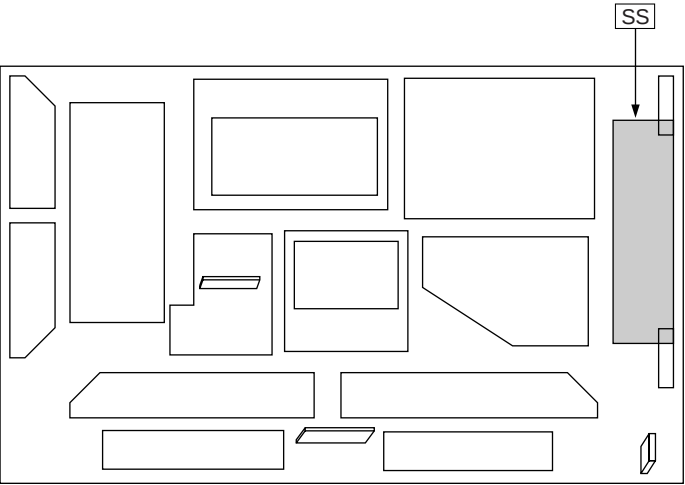


SU-BOARD			
IC		TP	
IC6401	B-2	TPSU1 TPSU2	E-2
IC6402	D-2		C-2
IC6403	E-2		
IC6404	F-2		
TRANSISTOR			
Q6401	B-2		

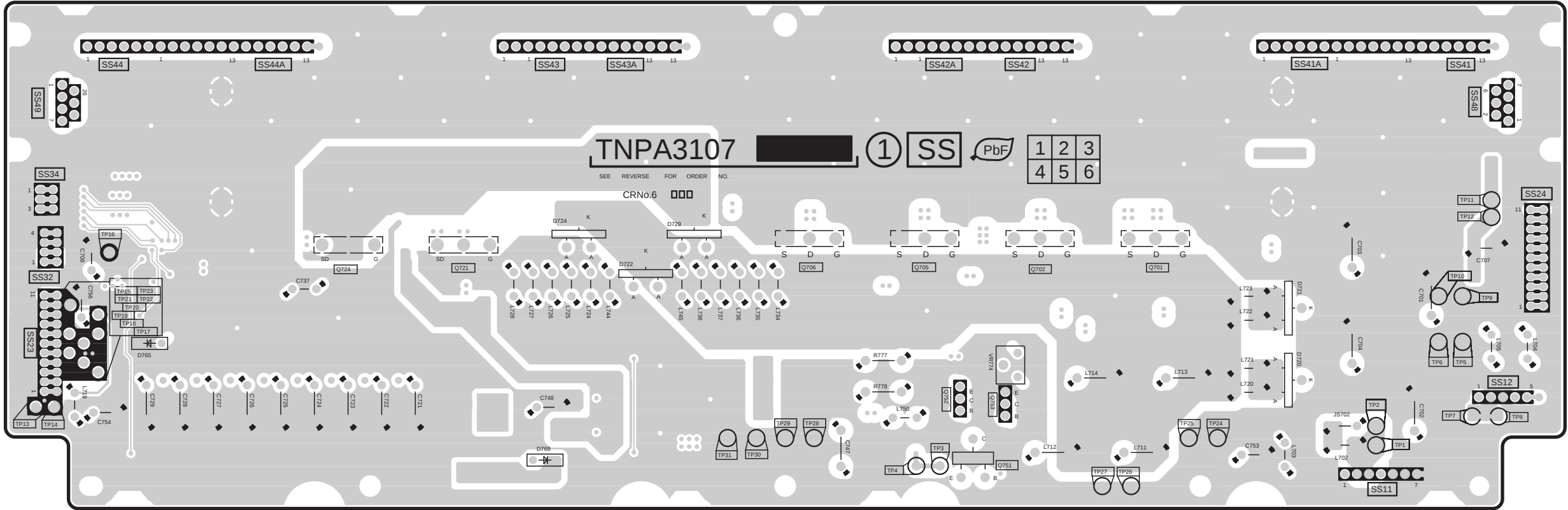
14.14. SD-Board (For TH-37PE30B)



Parts Location					
SS-BOARD (FOIL SIDE)					
TRANSISTOR		TP			
Q6701	G-2	TP6001	H-1	TP6016	A-2
Q6702	F-2	TP6002	H-1	TP6017	A-2
Q6705	F-2	TP6003	F-1	TP6018	A-2
Q6706	E-2	TP6004	E-1	TP6019	A-2
Q6721	C-2	TP6005	H-2	TP6020	A-2
Q6724	C-2	TP6006	H-2	TP6021	A-2
Q6751	F-1	TP6007	H-1	TP6022	A-2
Q6752	F-1	TP6008	H-1	TP6023	A-2
Q6753	F-1	TP6009	H-2	TP6024	G-1
		TP6010	H-2	TP6025	G-1
		TP6011	H-2	TP6026	G-1
		TP6012	H-2	TP6027	F-1
		TP6013	A-1	TP6028	E-1
		TP6014	A-1	TP6029	E-1
		TP6015	A-2	TP6030	E-1
				TP6031	E-1



SS-BOARD (FOIL SIDE)
TNPA3107 (TH-42PE30B)
TNPA3107AB (TH-37PE30B)



TH-37PE30B
SS-BOARD TNPA3107AB

TH-42PE30B
SS-BOARD TNPA3107

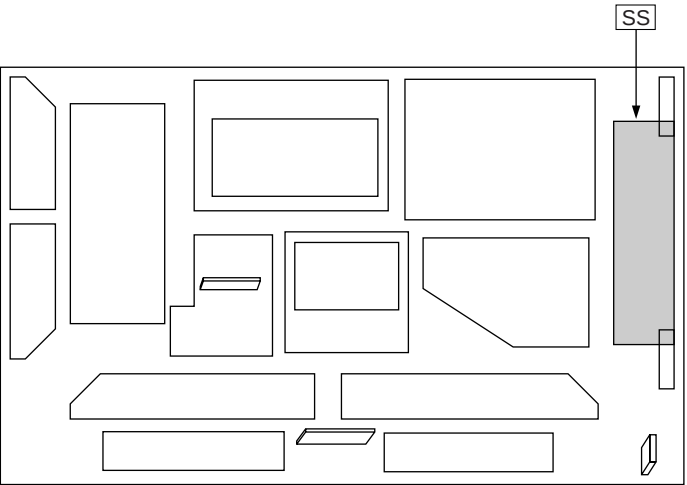
TH-37PE30B
SS-BOARD TNPA3107AB

TH-42PE30B
SS-BOARD TNPA3107

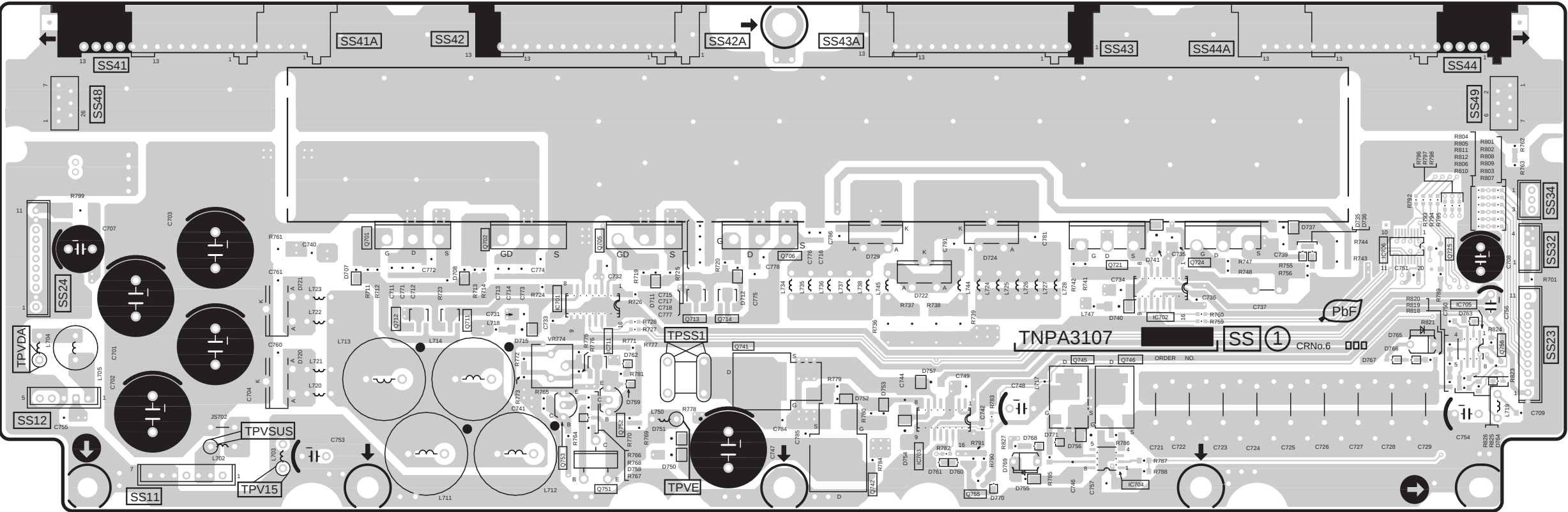
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A B C D E F G H I

Parts Location

SS-BOARD (COMPONENT SIDE)					
IC		TRANSISTOR		TP	
IC6701	D-2	Q6701	C-2	TPSS1	D-1
IC6702	G-2	Q6702	C-2	TPV15	B-1
IC6703	F-1	Q6705	D-2	TPVDA	A-2
IC6704	G-1	Q6706	E-2	TPVE	D-1
IC6705	H-2	Q6711	C-2	TPVSUS	B-1
IC6706	H-2	Q6712	C-2		
IC6711	D-2	Q6713	D-2		
		Q6714	E-2		
		Q6721	G-2		
		Q6724	G-2		
		Q6725	H-2		
		Q6741	E-2		
		Q6742	E-1		
		Q6745	F-1		
		Q6746	G-1		
		Q6751	D-1		
		Q6752	D-1		
		Q6753	D-1		
		Q6755	F-1		
		Q6756	I-2		

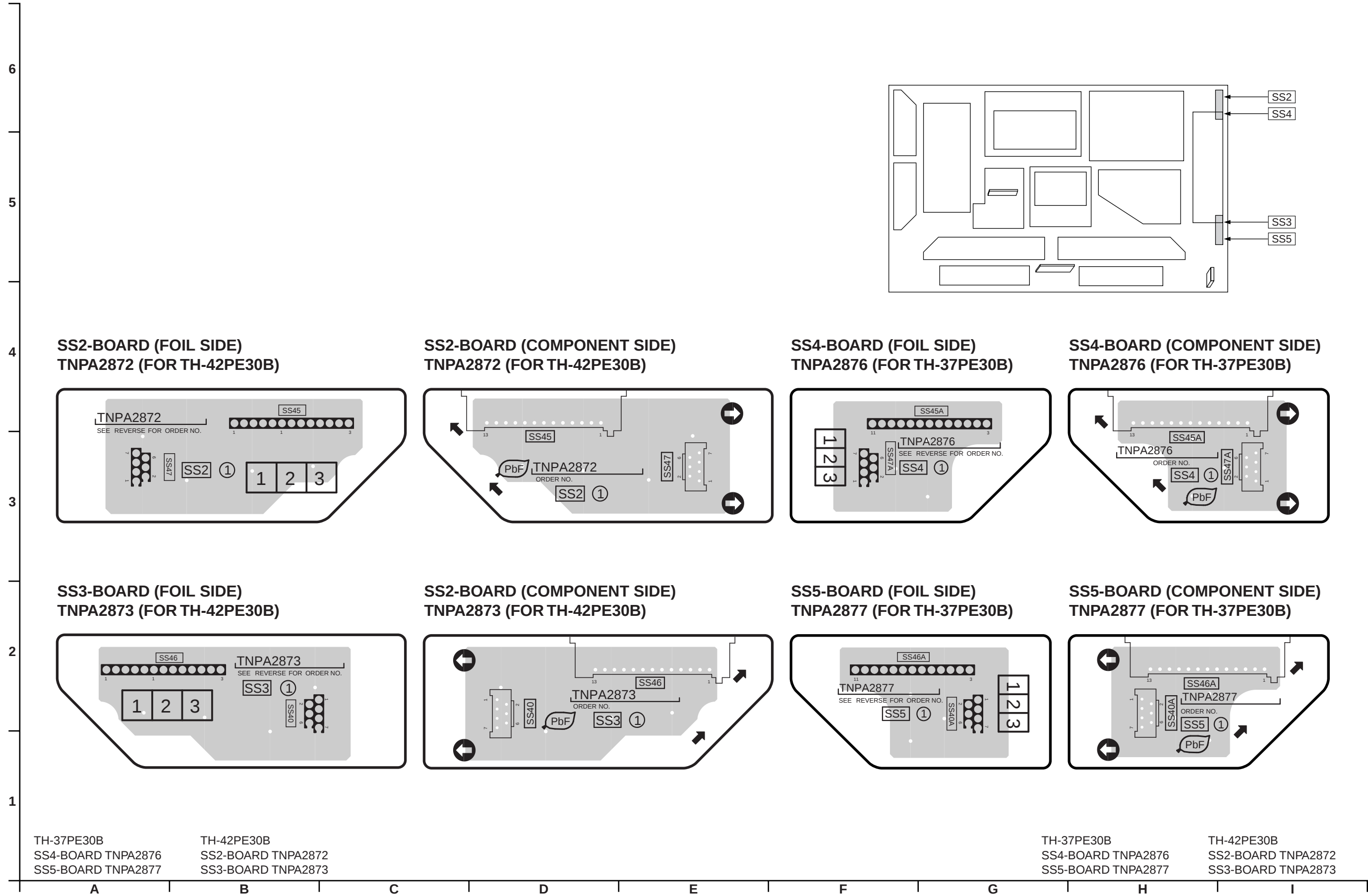


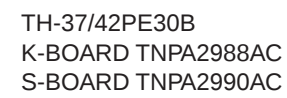
SS-BOARD (COMPONENT SIDE)
TNPA3107 (TH-42PE30B)
TNPA3107AB (TH-37PE30B)



TH-37PE30B SS-BOARD TNPA3107AB TH-42PE30B SS-BOARD TNPA3107 TH-37PE30B SS-BOARD TNPA3107AB TH-42PE30B SS-BOARD TNPA3107

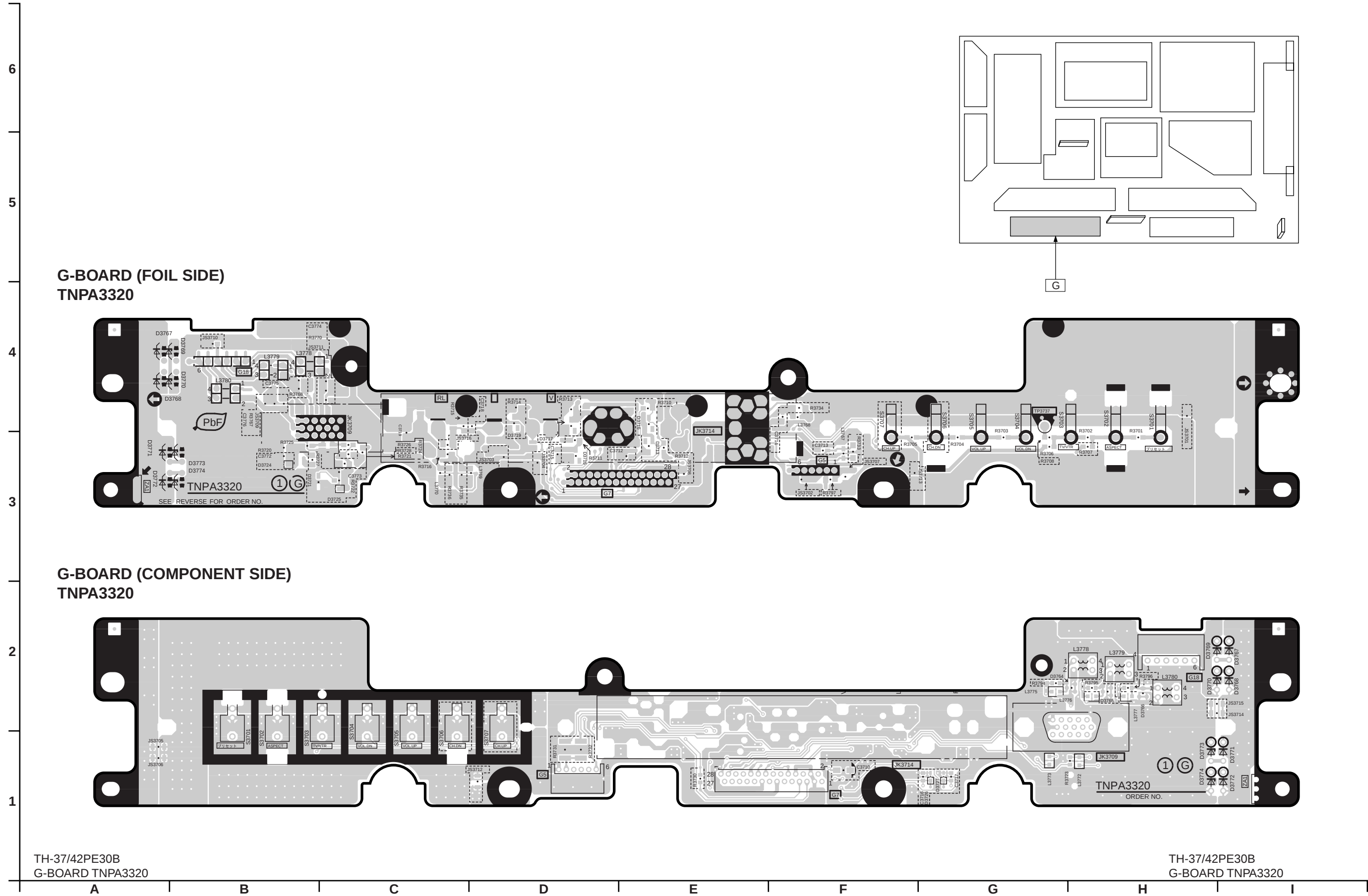
14.17. SS2, SS3, SS4 and SS5-Board





TH-37/42PE30B
K-BOARD TNPA2988AC
S-BOARD TNPA2990AC

14.19. G-Board



JG-BOARD (FOIL SIDE)
TNPA3151

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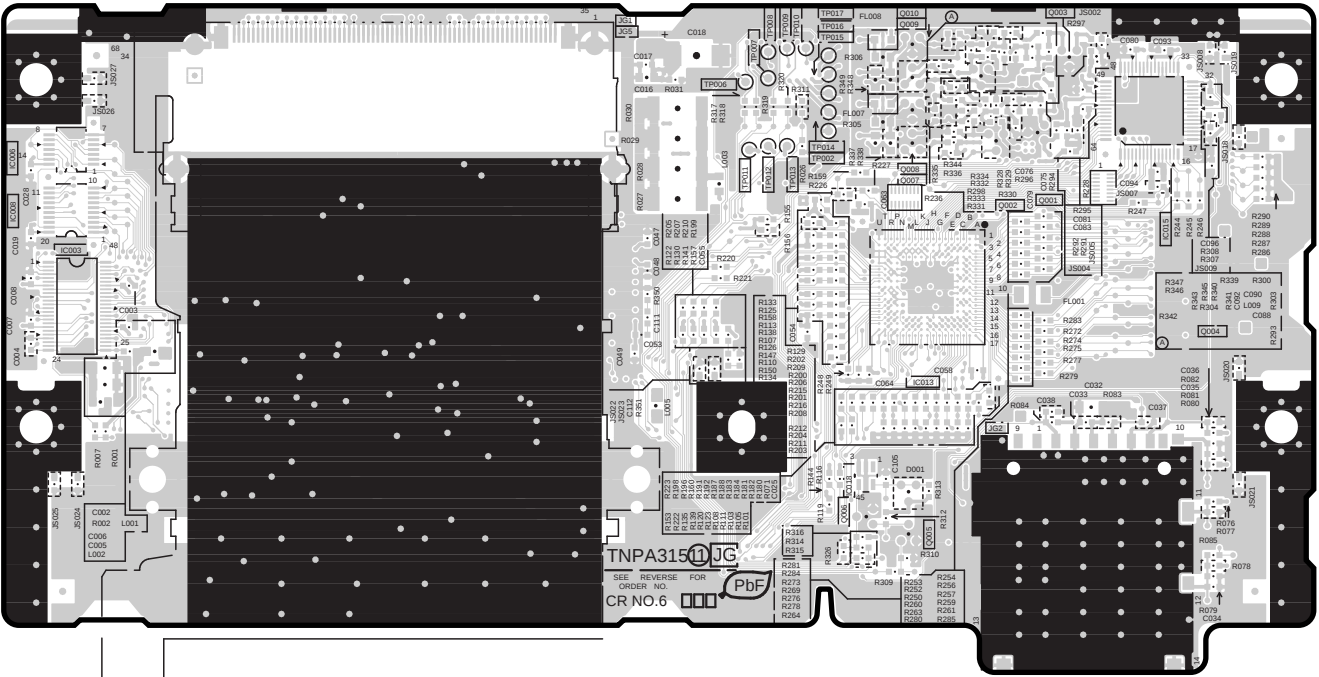
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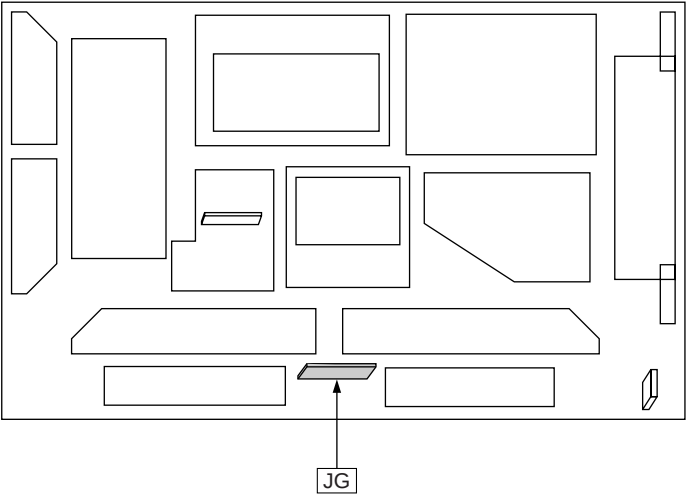
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TH-37/42PE30B
JG-BOARD TNPA3151

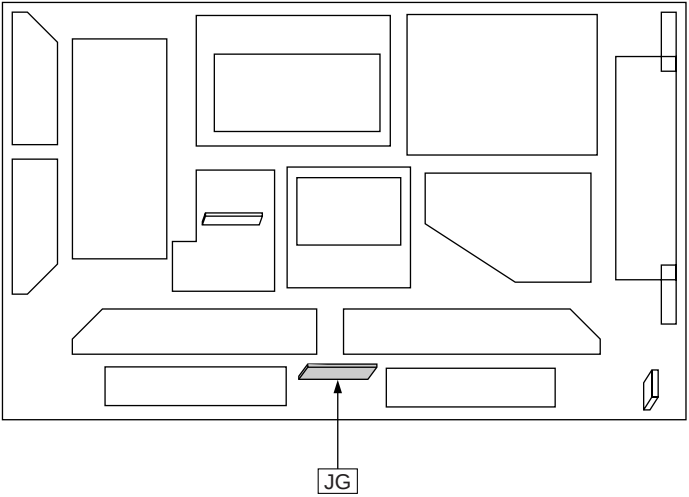
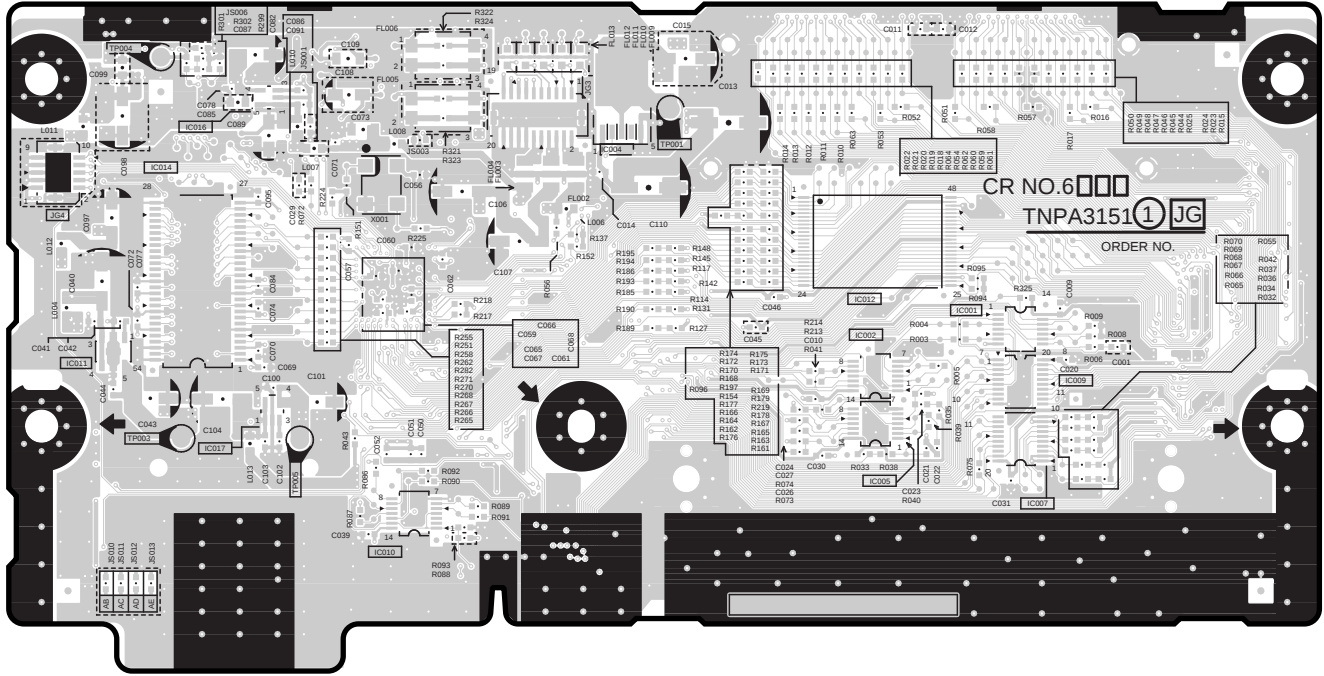


Parts Location

JG-BOARD (FOIL SIDE)					
IC		TRANSISTOR		TP	
IC6003	B-4	Q6001	E-4	TP6002	D-4
IC6006	B-4	Q6002	E-4	TP6006	D-4
IC6008	B-4	Q6003	E-4	TP6007	D-4
IC6013	D-3	Q6004	E-3	TP6008	D-4
IC6015	E-4	Q6005	D-3	TP6009	D-4
IC6018	D-3	Q6006	D-3	TP6010	D-4
		Q6007	D-4	TP6011	D-4
		Q6008	D-4	TP6012	D-4
		Q6009	D-4	TP6013	D-4
		Q6010	D-4	TP6014	D-4

TH-37/42PE30B
JG-BOARD TNPA3151

JG-BOARD (COMPONENT SIDE)
TNPA3151

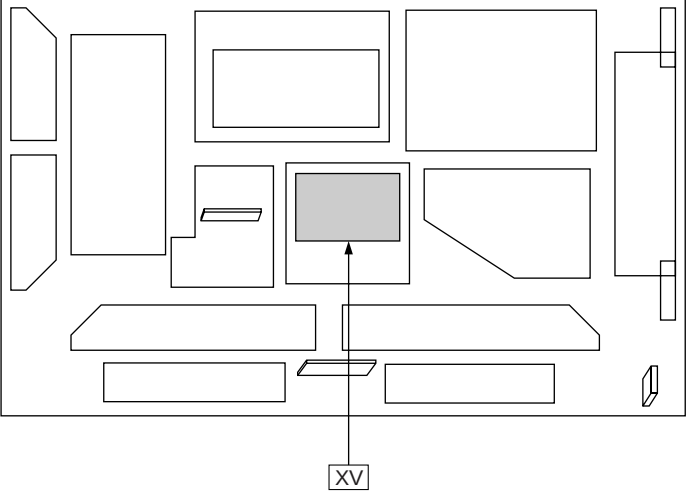
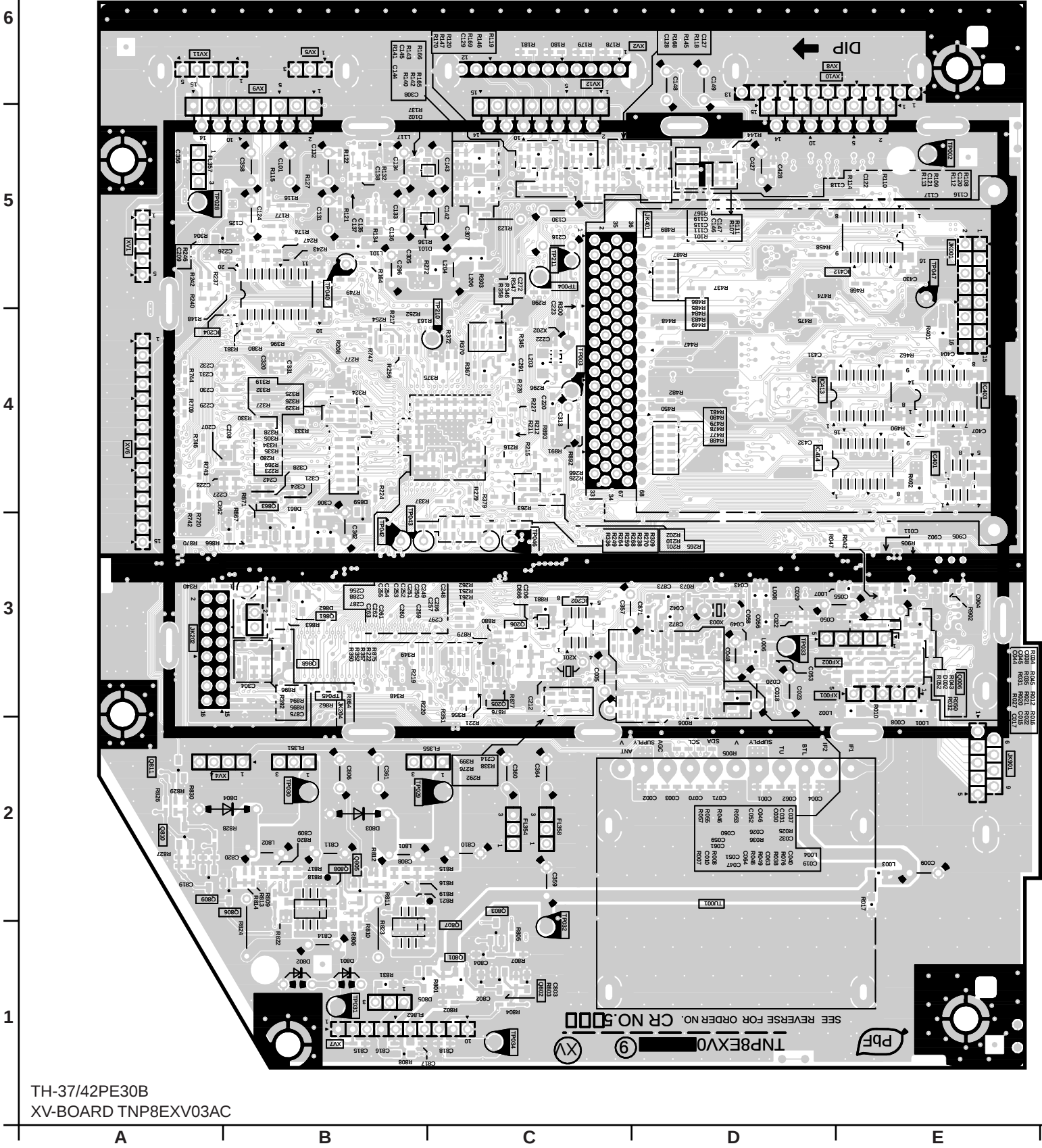


Parts Location

JG-BOARD (COMPONENT SIDE)			
IC		TP	
IC6001	E-3	TP6001	D-4
IC6002	D-3	TP6003	B-3
IC6004	C-4	TP6004	B-4
IC6005	D-3	TP6005	B-3
IC6007	E-3		
IC6009	E-3		
IC6010	C-3		
IC6011	B-3		
IC6012	D-3		
IC6014	B-4		
IC6016	B-4		
IC6017	B-3		

14.21. XV-Board

XV-BOARD (FOIL SIDE)
TNP8EXV03AC



Parts Location

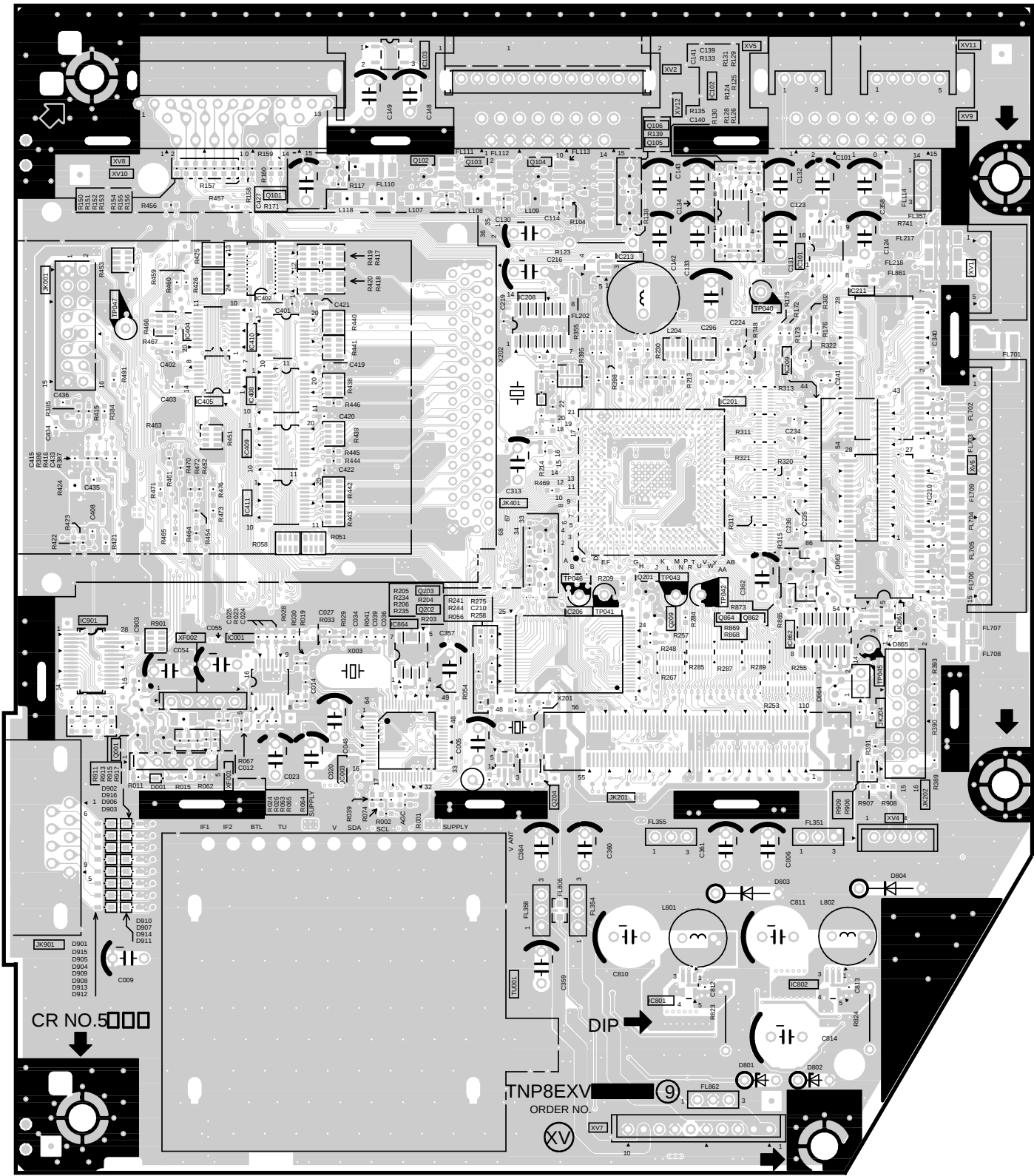
XV-BOARD (FOIL SIDE)					
IC		TRANSISTOR		TP	
IC5001	B-3	Q5002	B-3	TP5002	E-5
IC5202	C-3	Q5005	B-3	TP5003	C-4
IC5204	A-4	Q5006	E-3	TP5004	C-5
IC5401	E-4	Q5205	C-3	TP5028	A-5
IC5403	E-4	Q5206	C-3	TP5029	B-2
IC5412	E-5	Q5801	C-1	TP5030	B-2
IC5413	D-4	Q5802	C-1	TP5031	B-1
IC5414	D-4	Q5803	C-2	TP5032	C-1
		Q5805	B-2	TP5033	D-3
		Q5806	B-2	TP5034	C-1
		Q5807	C-1	TP5040	B-5
		Q5808	B-2	TP5042	B-3
		Q5809	A-2	TP5043	B-3
		Q5810	A-2	TP5045	B-2
		Q5811	A-2	TP5046	C-3
		Q5861	B-3	TP5047	E-5
		Q5863	B-4	TP5210	C-4
		Q5868	B-3	TP5211	C-5

TH-37/42PE30B
XV-BOARD TNP8EXV03AC

TH-37/42PE30B
XV-BOARD TNP8EXV03AC

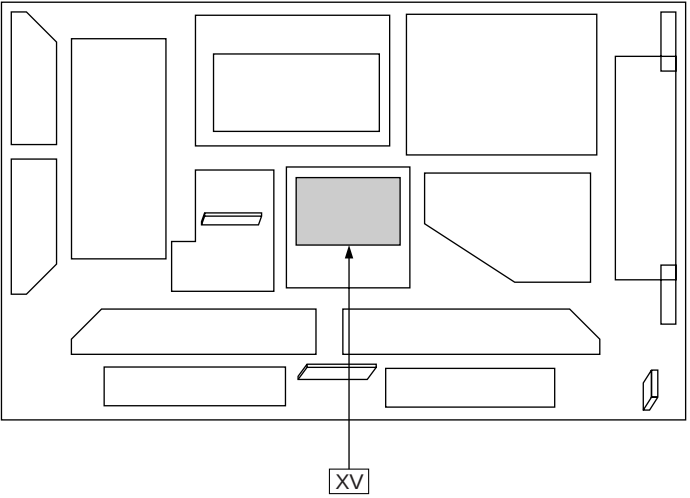
XV-BOARD (COMPONENT SIDE)
TNP8EXV03AC

6
5
4
3
2
1



TH-37/42PE30B
XV-BOARD TNP8EXV03AC

A B C D E F G H I



Parts Location

XV-BOARD (COMPONENT SIDE)					
IC		TRANSISTOR		TP	
IC5003	B-3	Q5001	A-3	TP5040	D-5
IC5101	D-5	Q5101	B-5	TP5041	D-3
IC5102	D-6	Q5102	C-5	TP5042	D-3
IC5103	C-6	Q5103	C-5	TP5043	D-3
IC5201	D-4	Q5104	C-5	TP5045	E-3
IC5206	C-3	Q5105	D-5	TP5046	C-3
IC5207	C-3	Q5106	D-5	TP5047	A-5
IC5208	C-5	Q5201	D-3		
IC5209	D-4	Q5202	C-3		
IC5210	E-4	Q5203	C-3		
IC5211	E-5	Q5204	C-2		
IC5213	D-5	Q5209	D-3		
IC5402	B-5	Q5862	D-3		
IC5404	C-5	Q5864	D-3		
IC5405	B-4				
IC5408	B-4				
IC5409	B-4				
IC5410	B-5				
IC5411	B-4				
IC5801	D-2				
IC5802	D-2				
IC5861	E-3				
IC5862	D-3				
IC5864	C-3				
IC5901	A-3				

TH-37/42PE30B
XV-BOARD TNP8EXV03AC

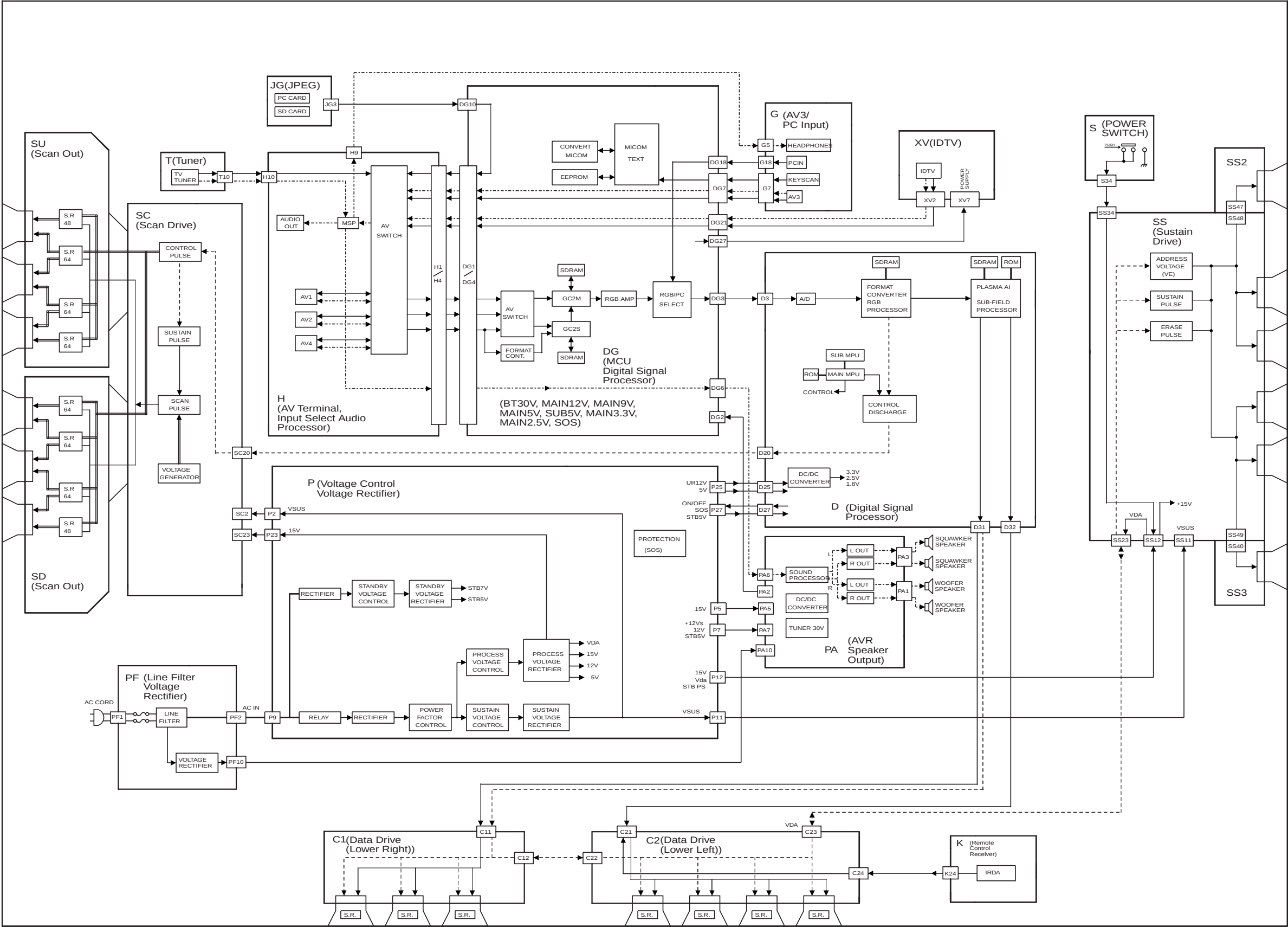
15.1. Schematic Diagram Notes

Components identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacture's specified parts.

10. This schematic diagram is the latest at the time of printing and subject to change without notice.

MA150- MA162 (Replacement part)

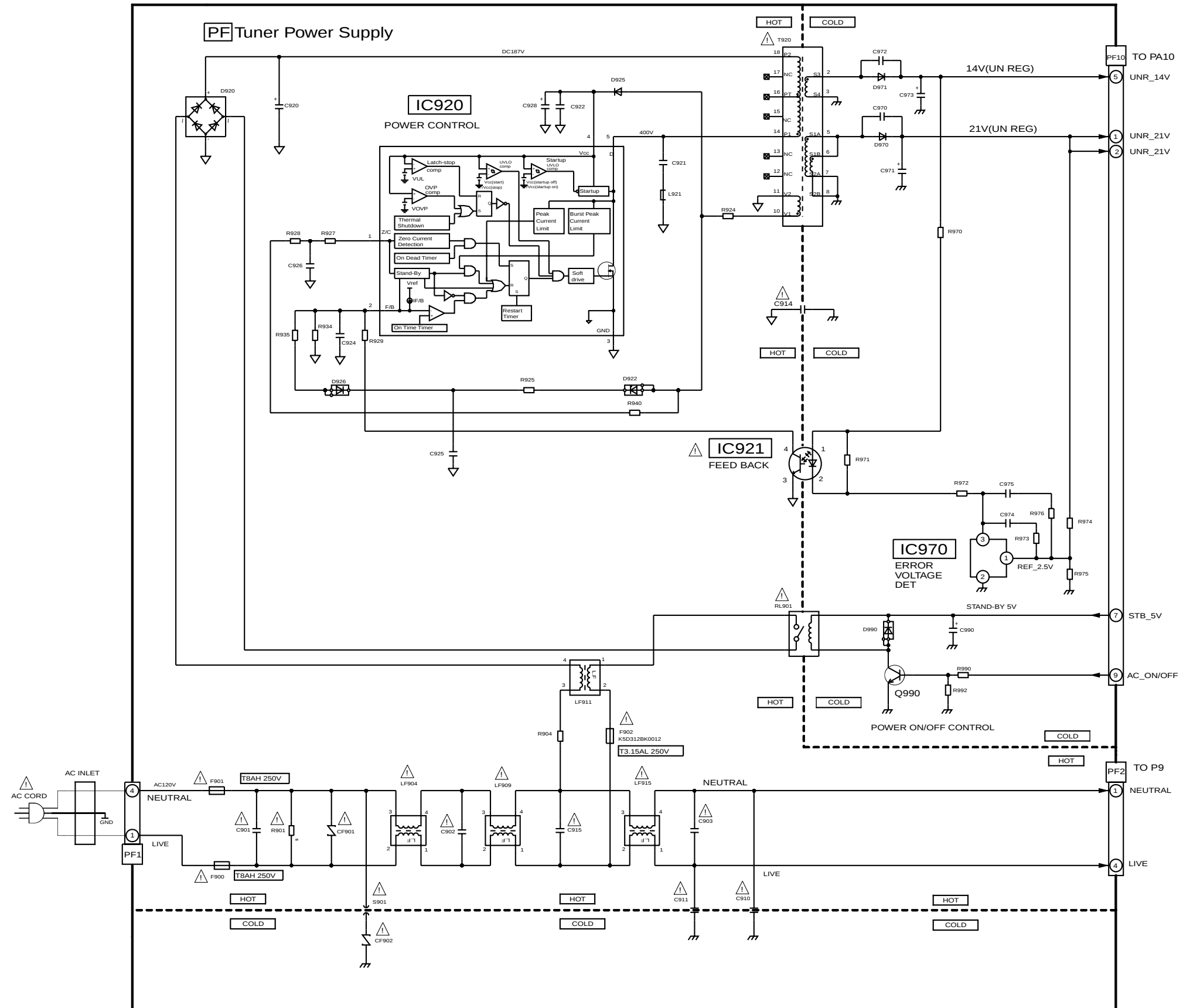
15.2. Main Block Diagram



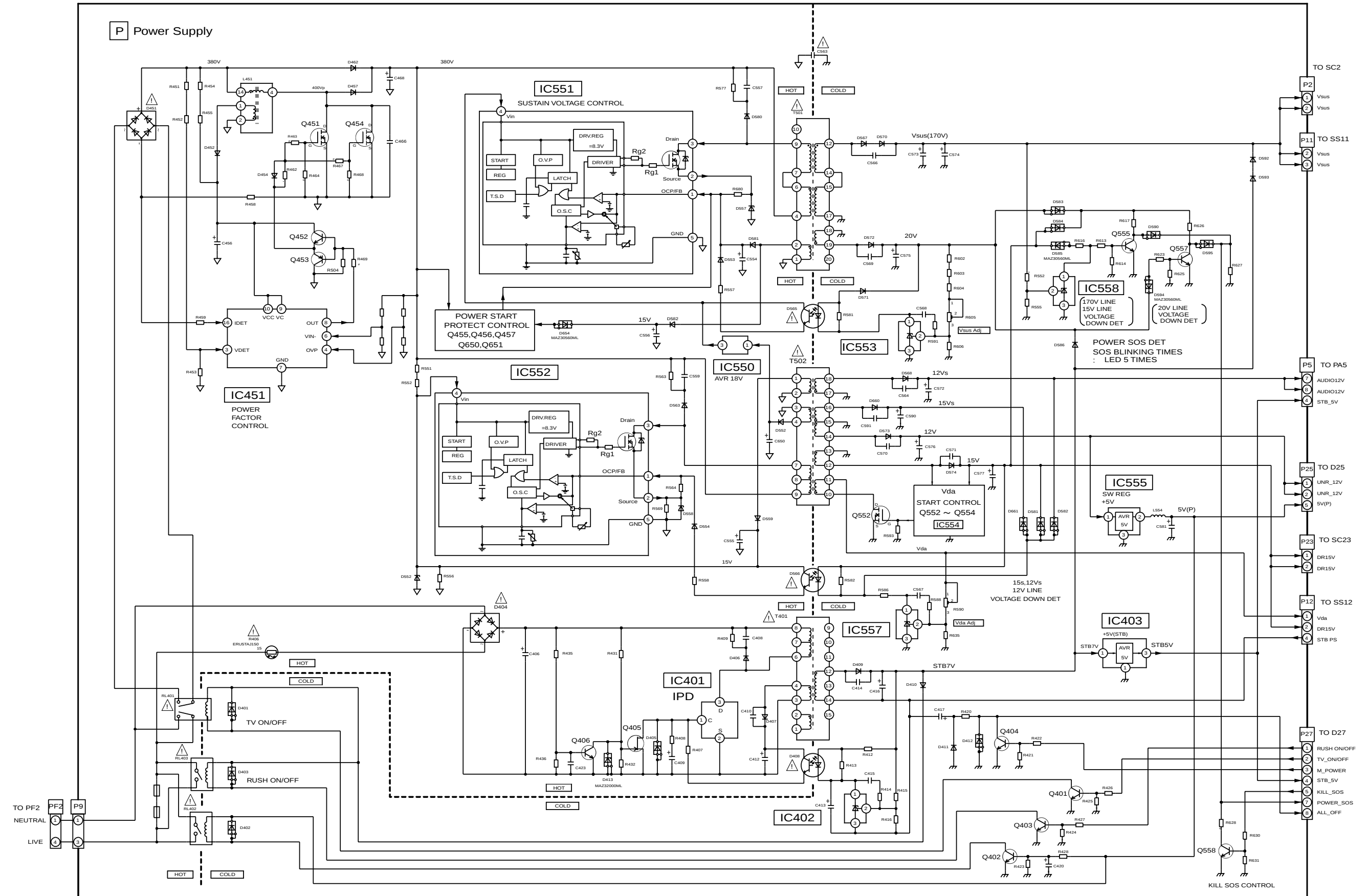
TH-37PE30B/TH-42PE30B Main Block Diagram

TH-37PE30B/TH-42PE30B Main Block Diagram

15.3. PF-Board Block Diagram

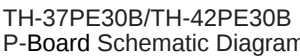




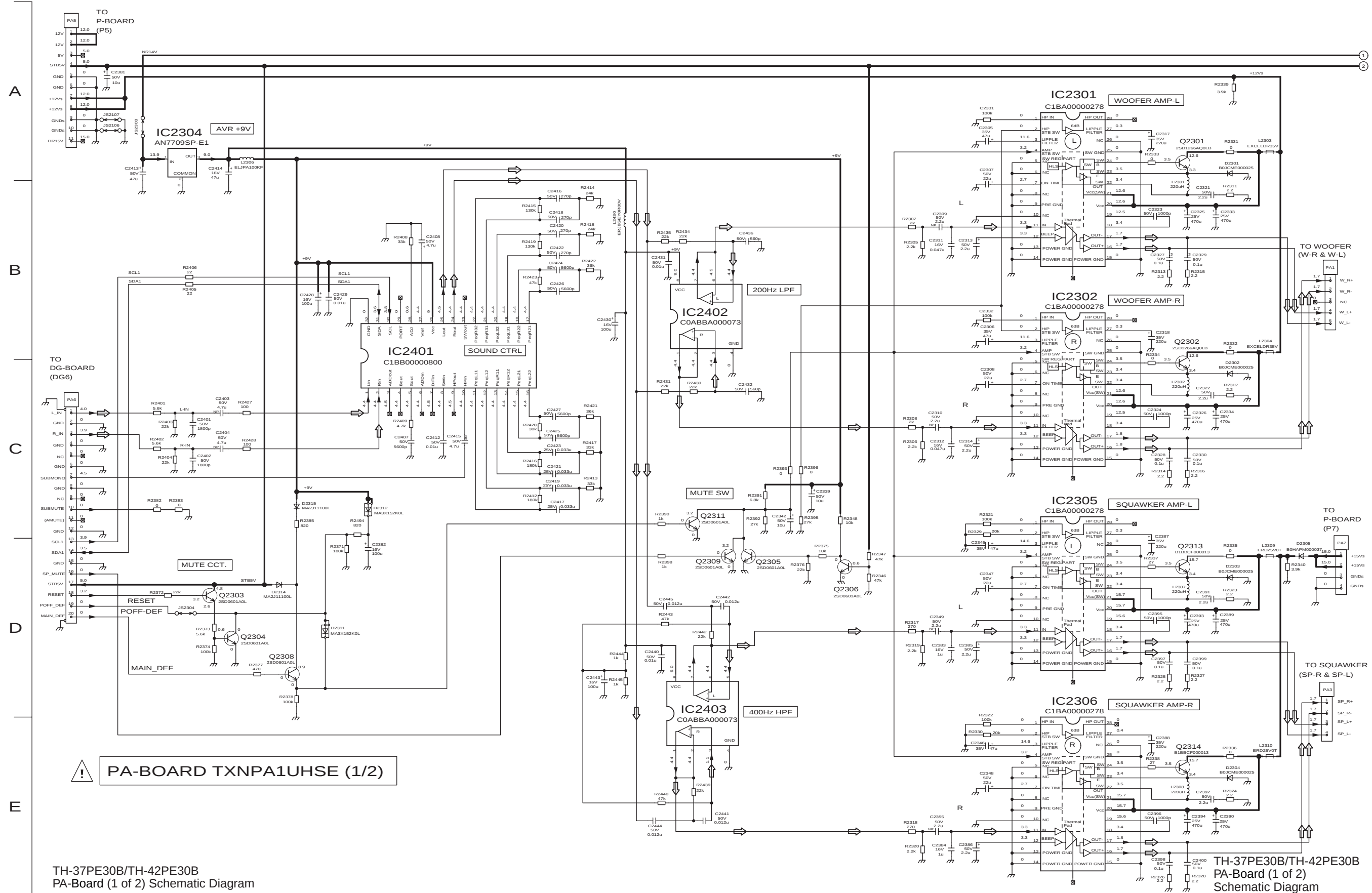


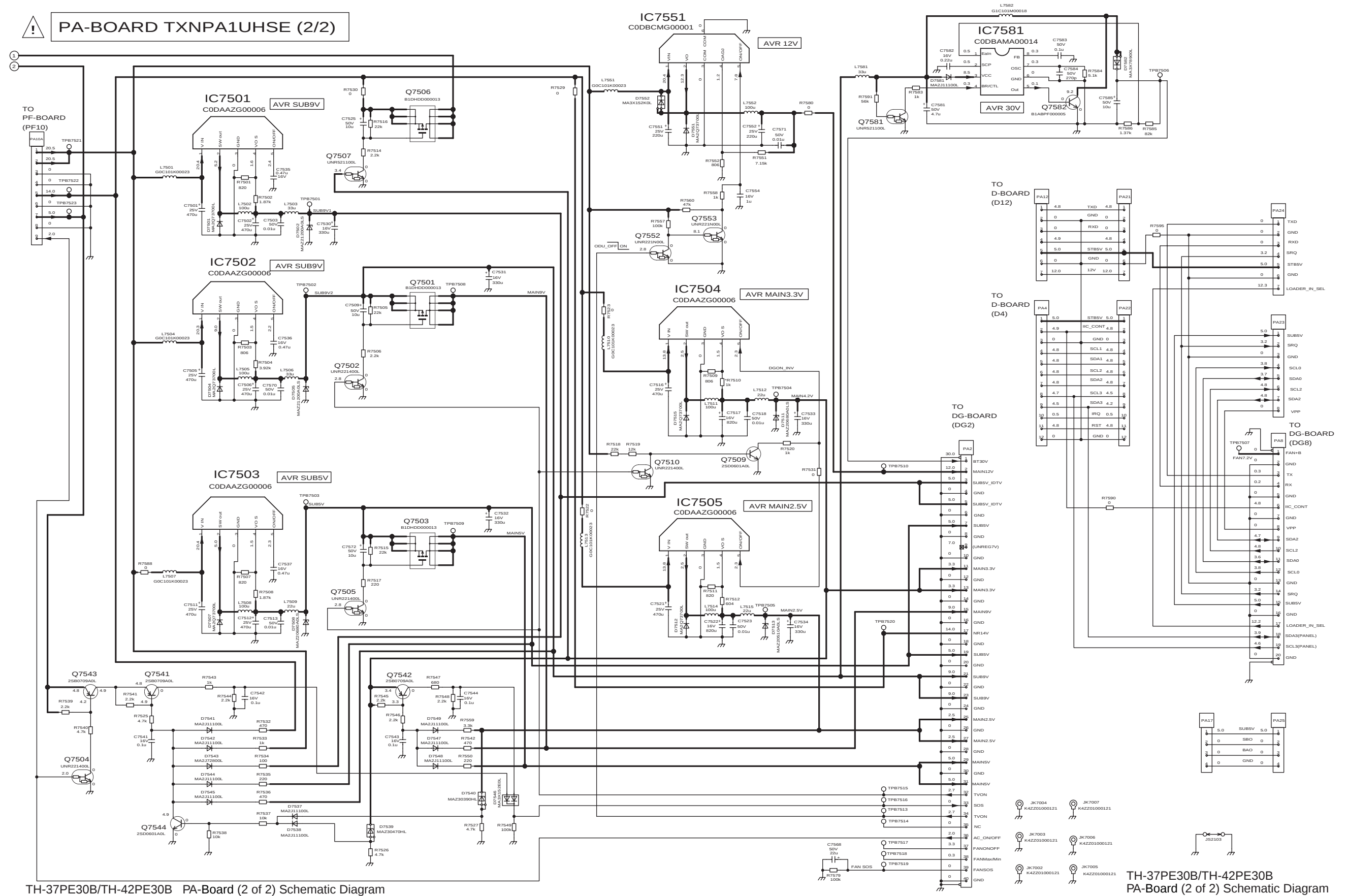
TH-37PE30B/TH-42PE30B P-Board Block Diagram

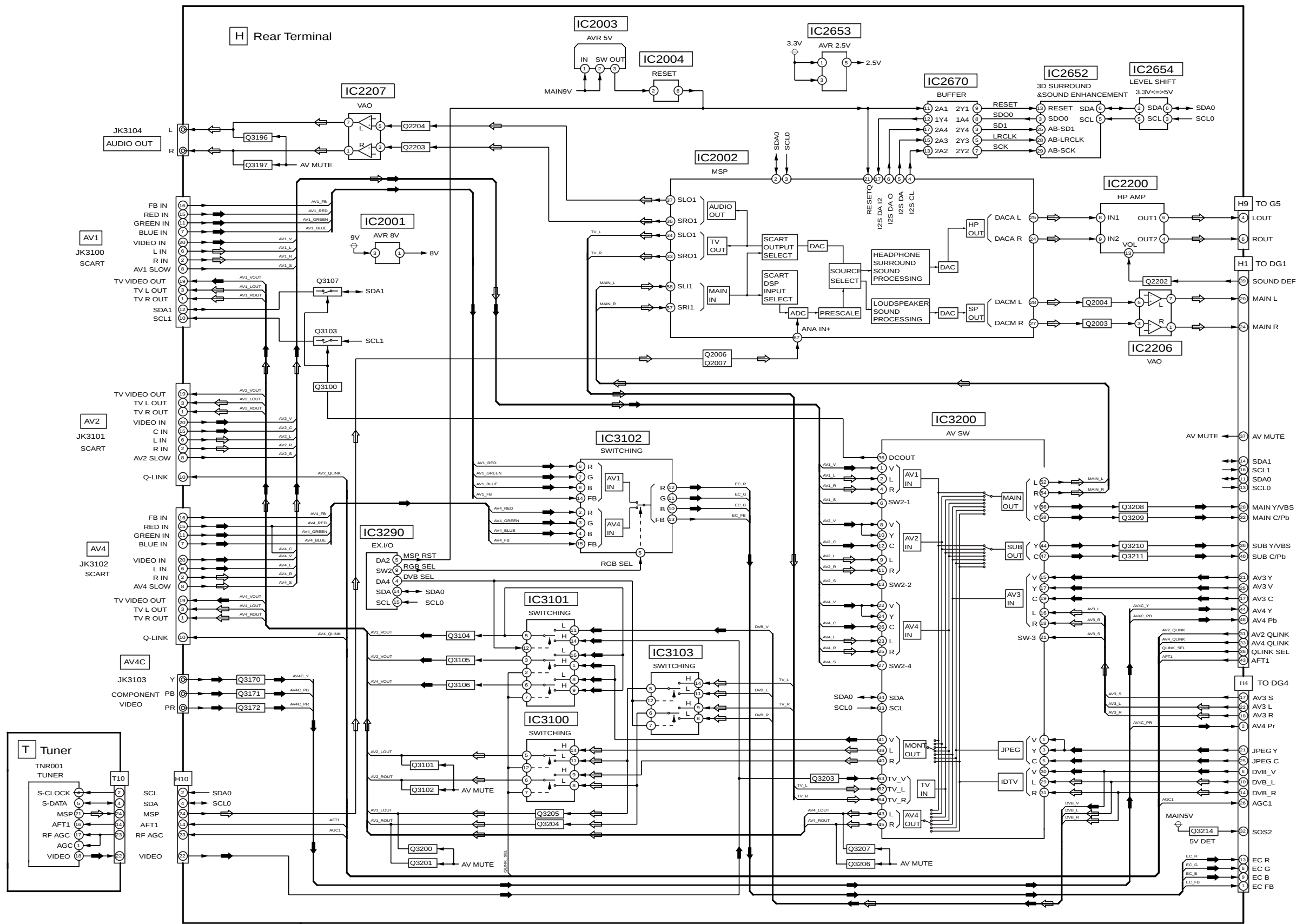
TH-37PE30B/TH-42PE30B P-Board Block Diagram



15.8. PA-Board (1 of 2) Schematic Diagram

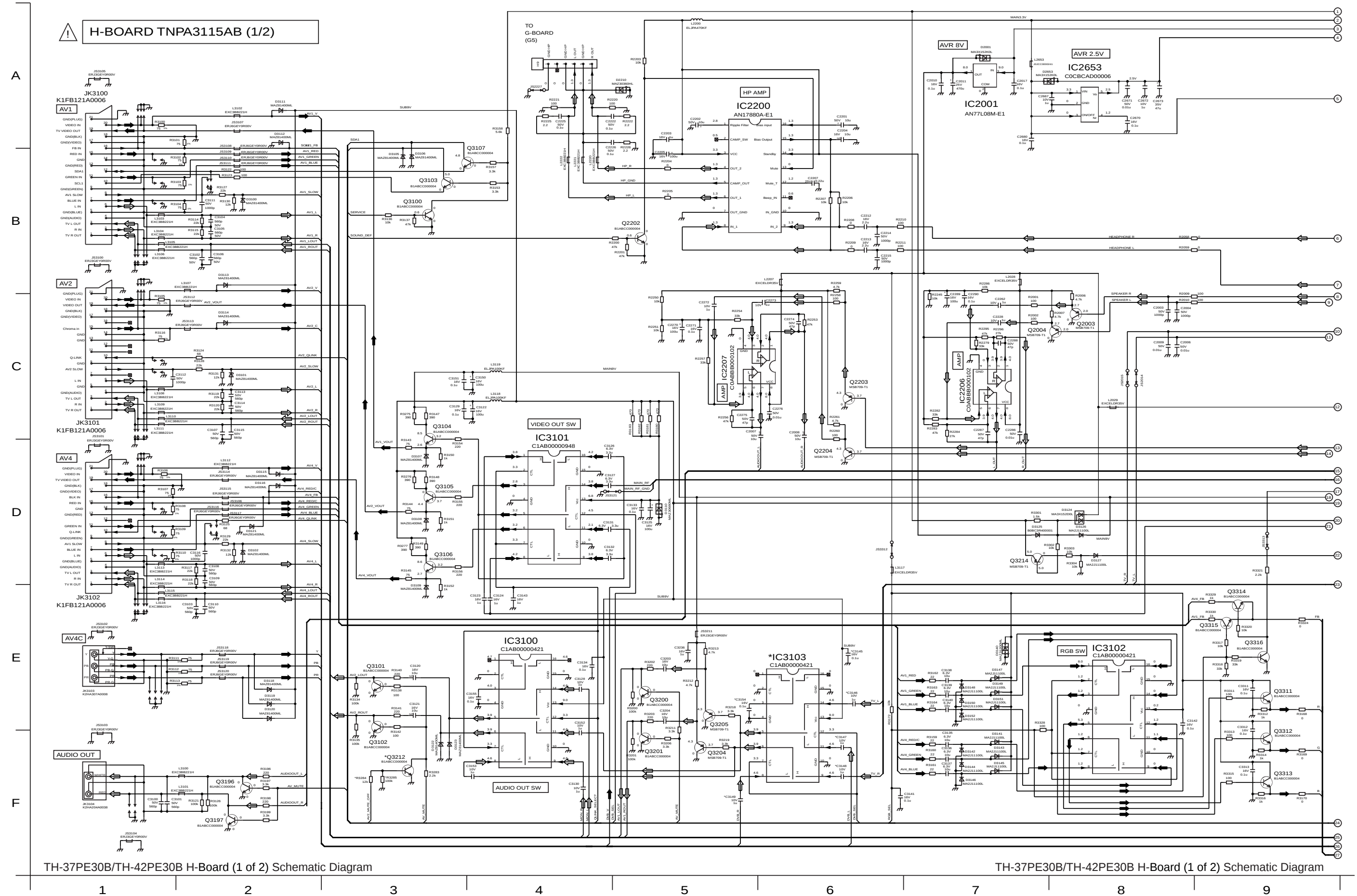


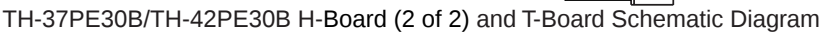


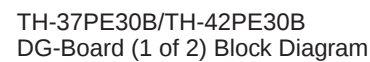


TH-37PE30B/TH-42PE30B H-Board Block Diagram

TH-37PE30B/TH-42PE30B H-Board Block Diagram

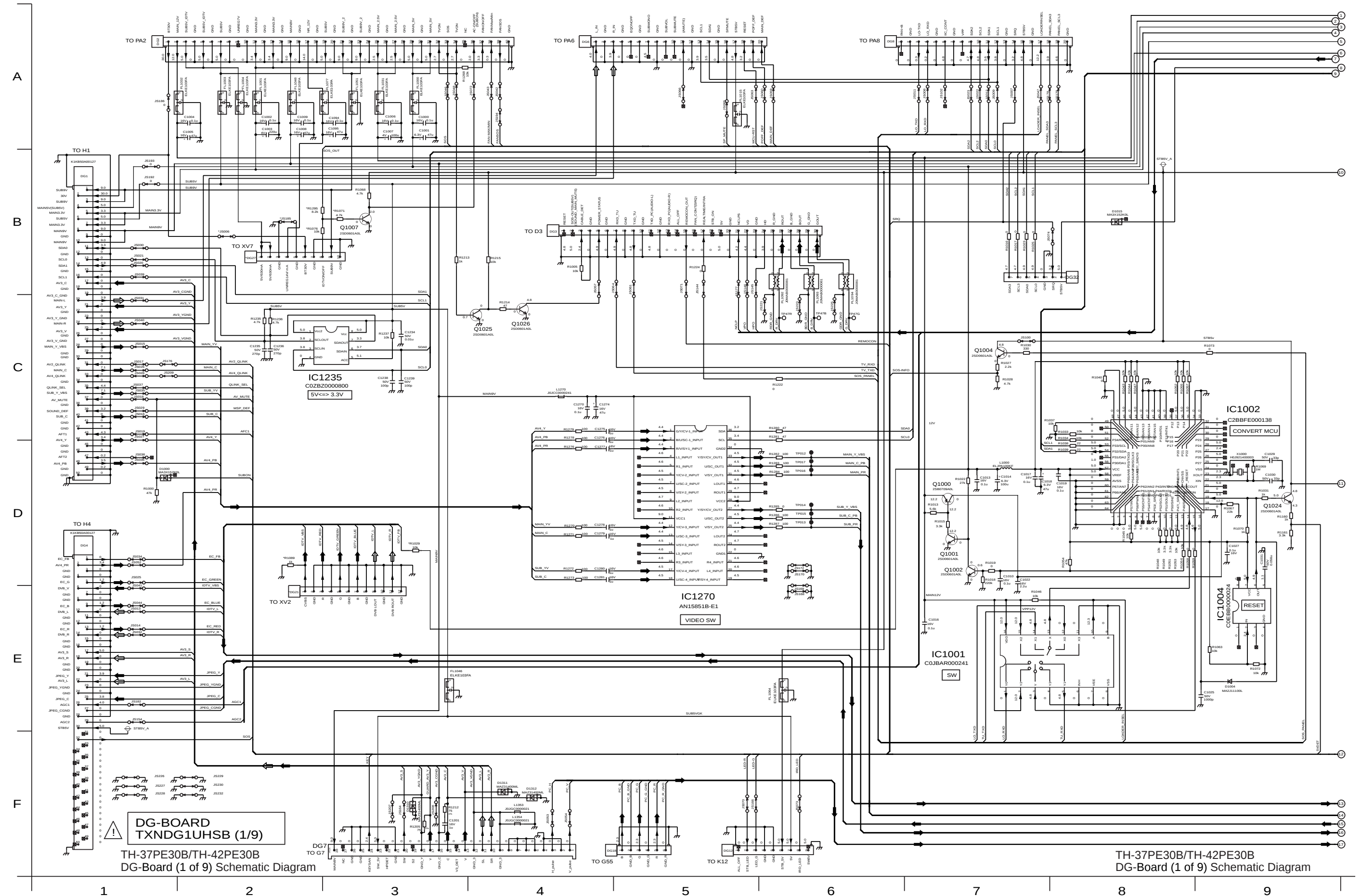




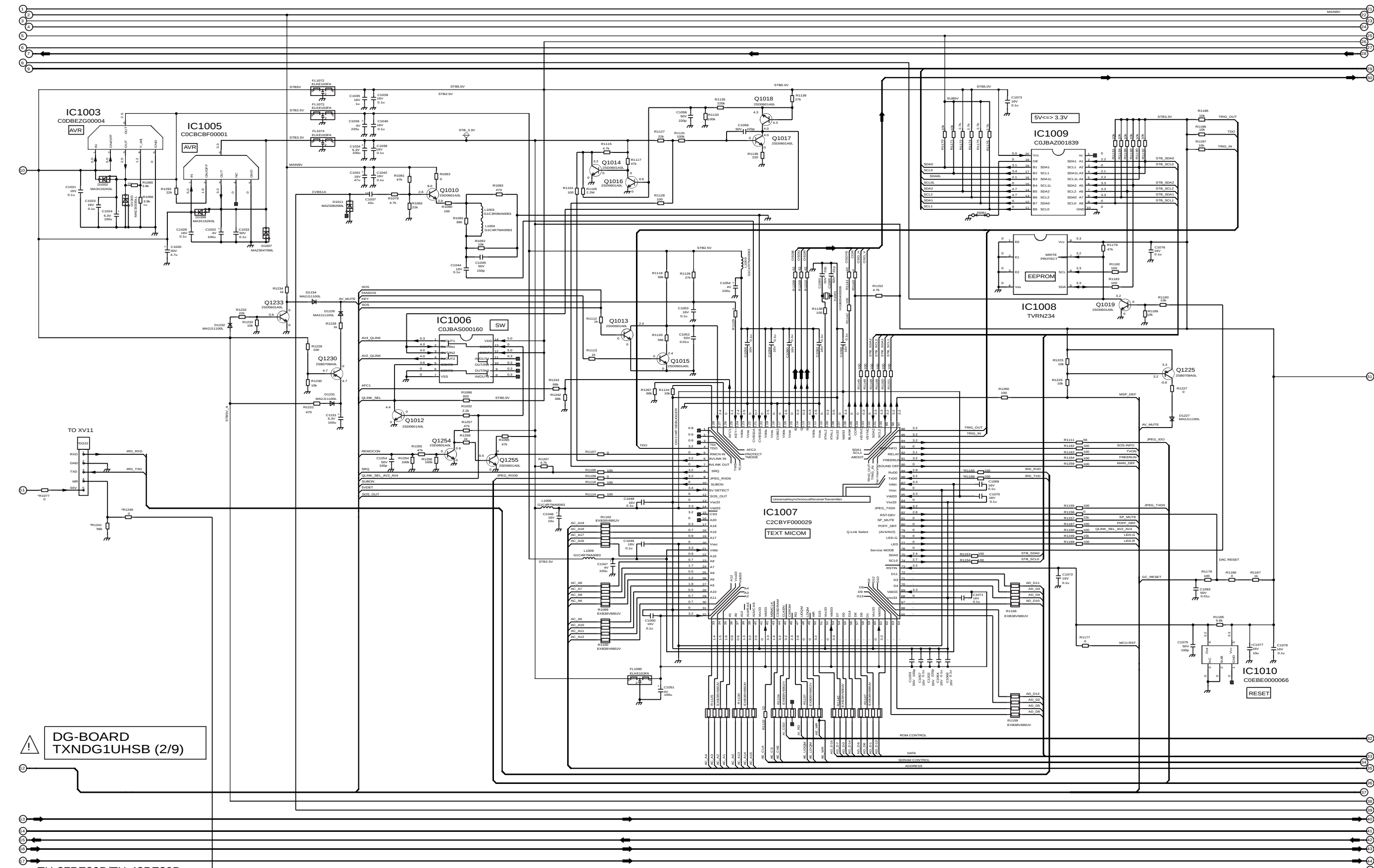




15.15. DG-Board (1 of 9) Schematic Diagram

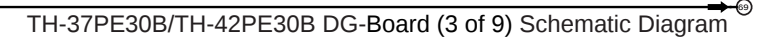


15.16. DG-Board (2 of 9) Schematic Diagram

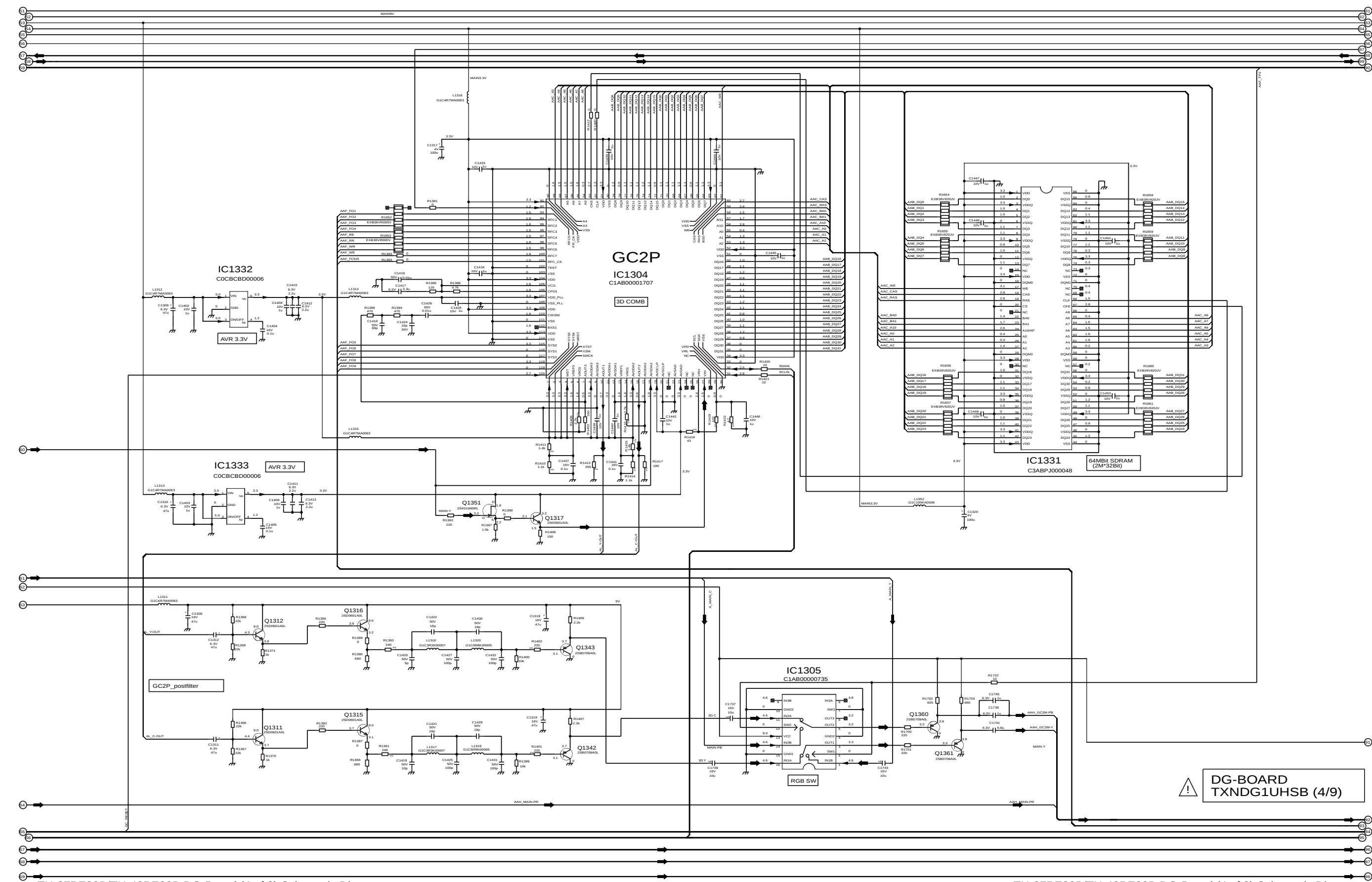


TH-37PE30B/TH-42PE30B
DG-Board (2 of 9) Schematic Diagram

TH-37PE30B/TH-42PE30B DG-Board (2 of 9) Schematic Diagram

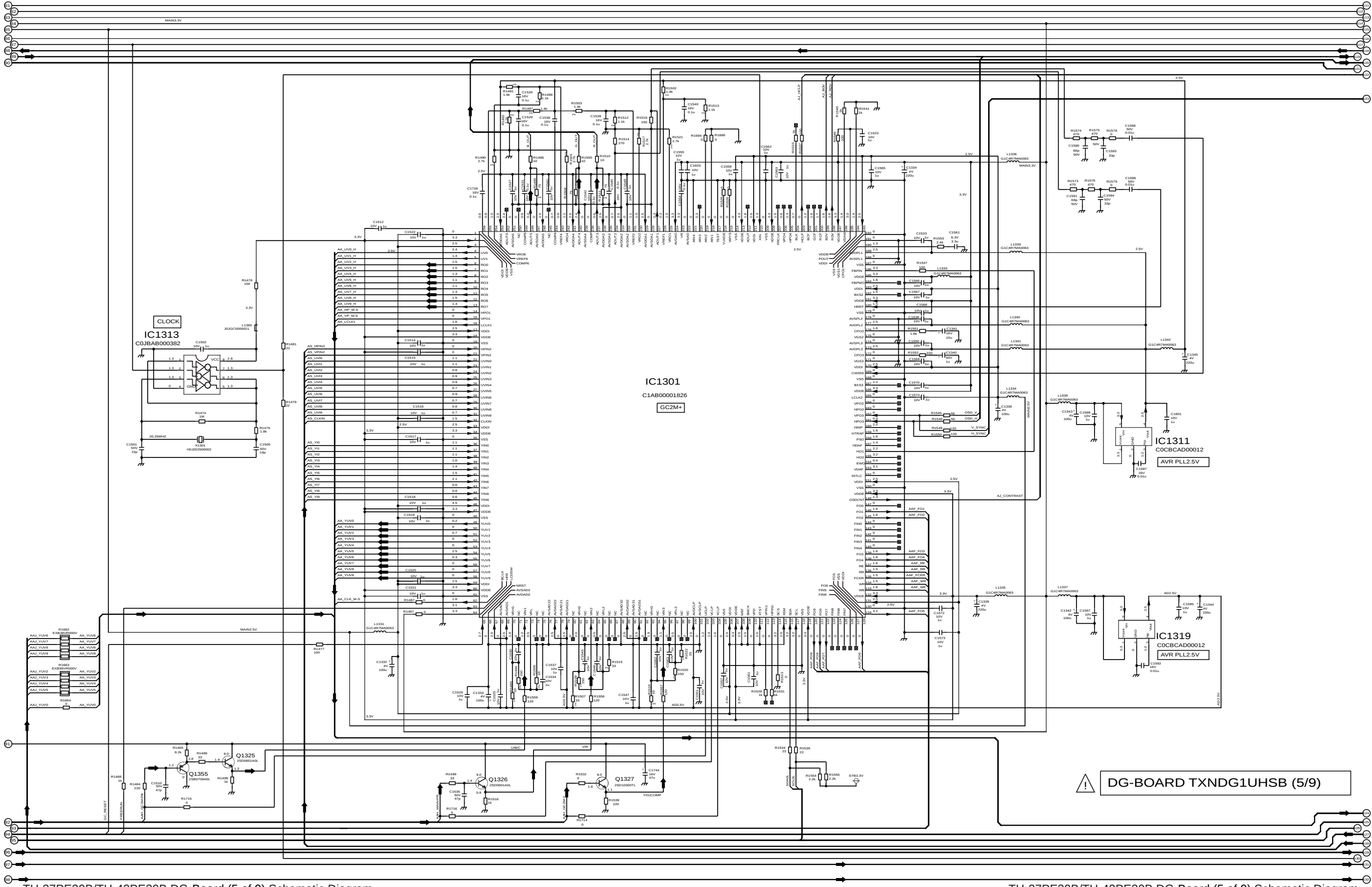


15.18. DG-Board (4 of 9) Schematic Diagram

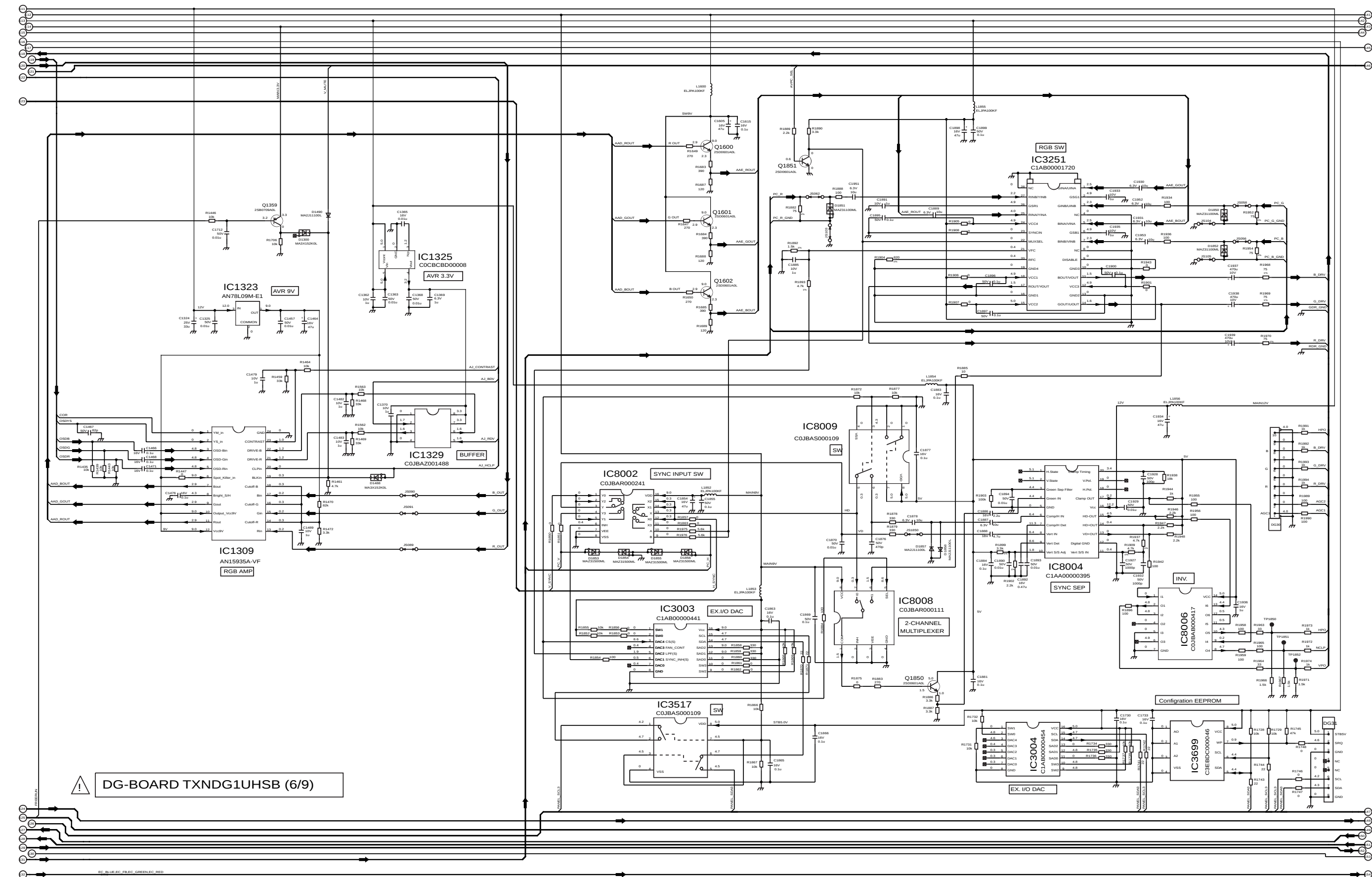


! DG-BOARD TXNDG1UHSB (4/9)

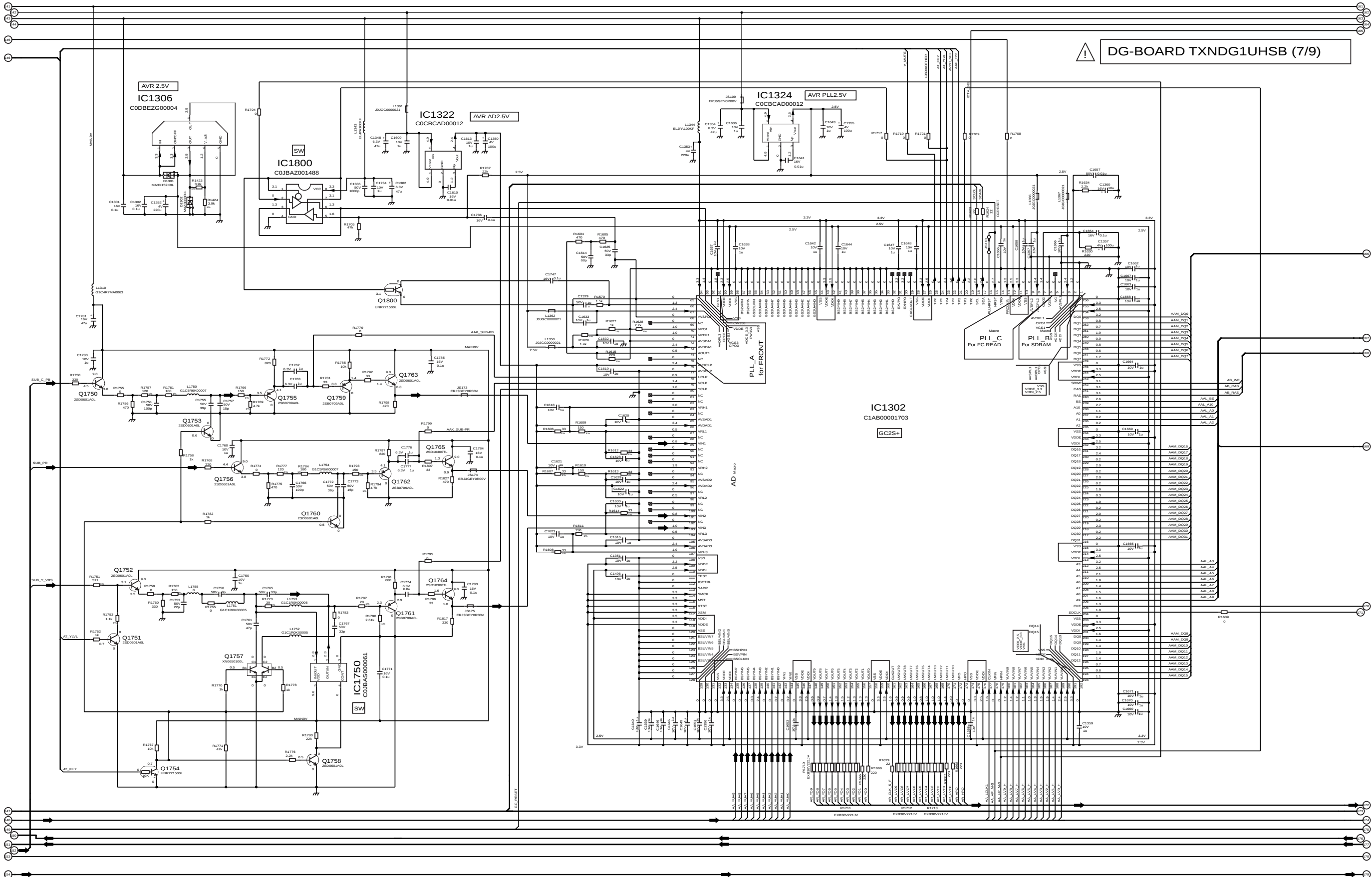
15.19. DG-Board (5 of 9) Schematic Diagram



15.20. DG-Board (6 of 9) Schematic Diagram

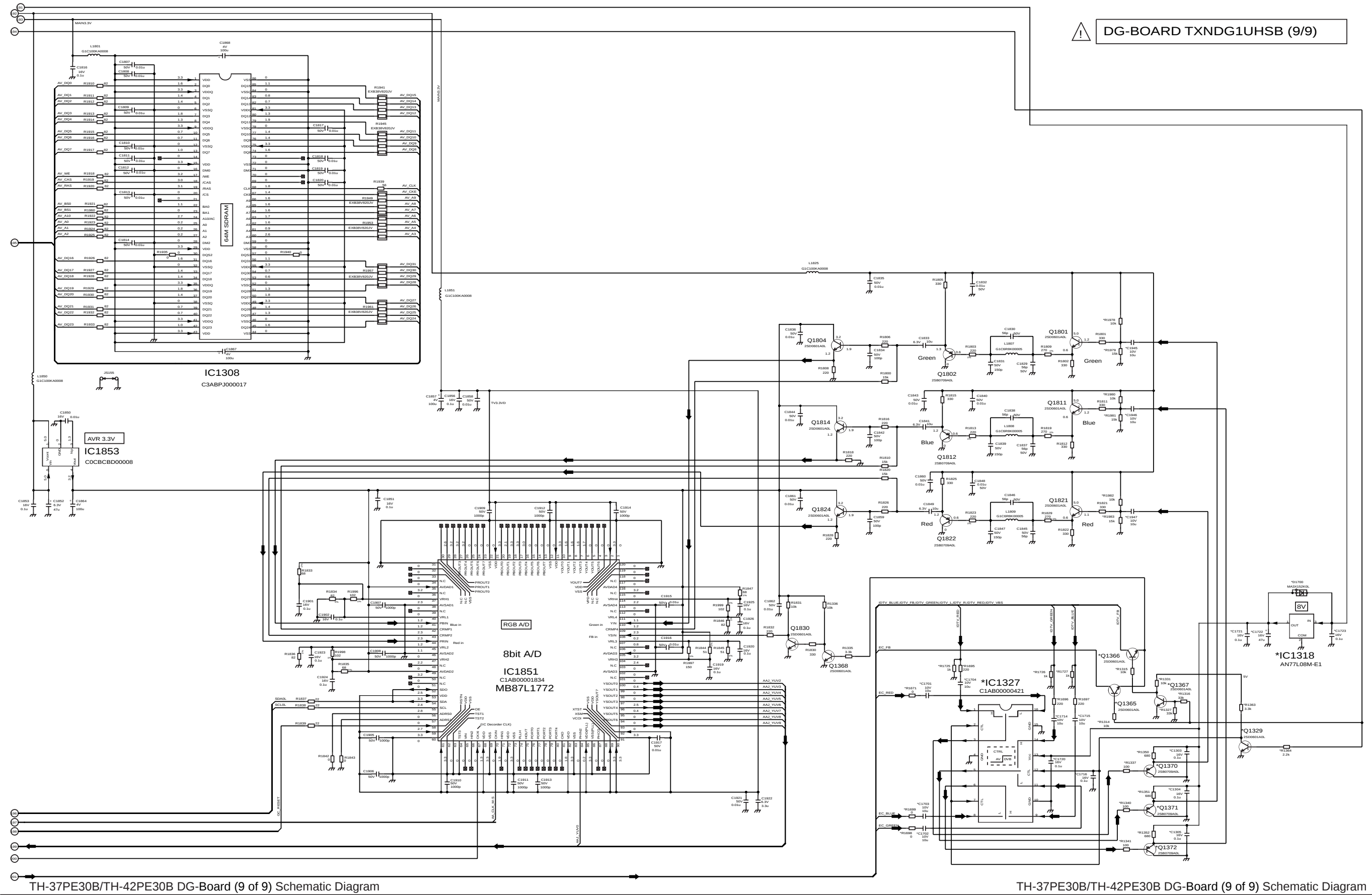


15.21. DG-Board (7 of 9) Schematic Diagram

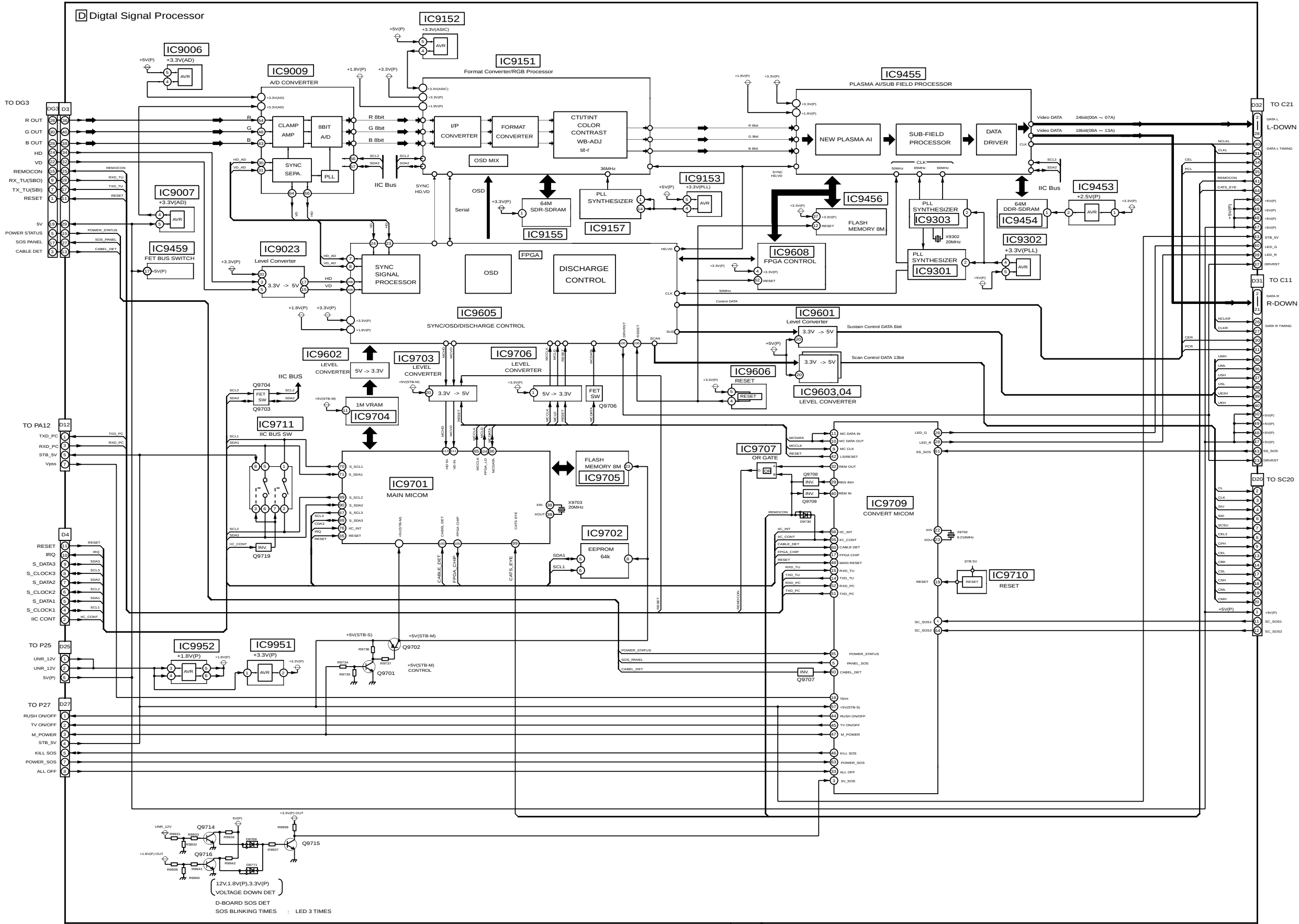




15.23. DG-Board (9 of 9) Schematic Diagram



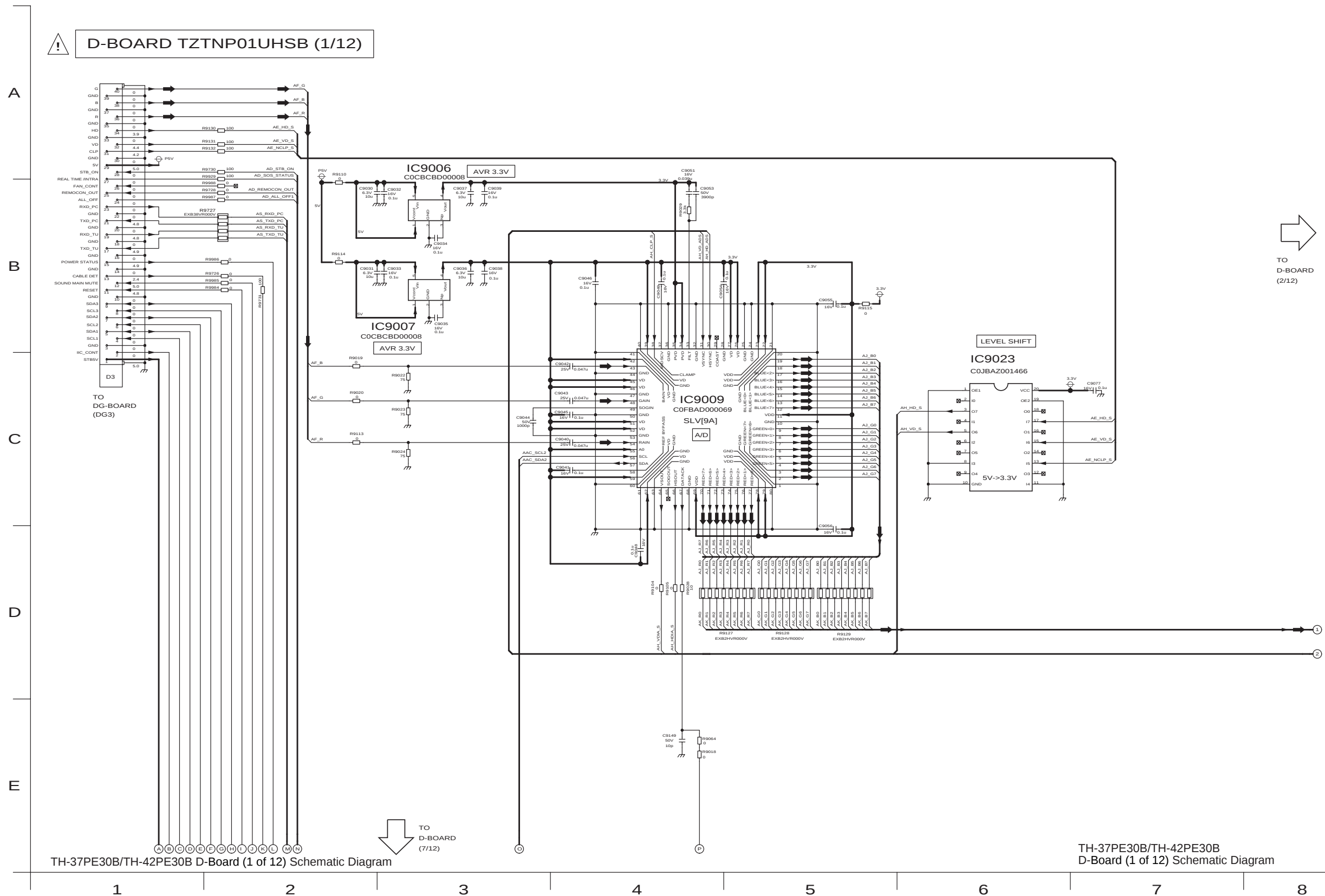
15.24. D-Board Block Diagram



TH-37PE30B/TH-42PE30B
D-Board Block Diagram

TH-37PE30B/TH-42PE30B
D-Board Block Diagram

15.25. D-Board (1 of 12) Schematic Diagram



15.26. D-Board (2 of 12) Schematic Diagram

 D-BOARD TZTNP01UHSB (2/12)



TO
D-BOARD
(1/12)



TO
D-BOARD
(3/12)



TO
D-BOARD
(8/12)



19

TH-37PE30B/TH-42PE30B
D-Board (2 of 12) Schematic Diagram

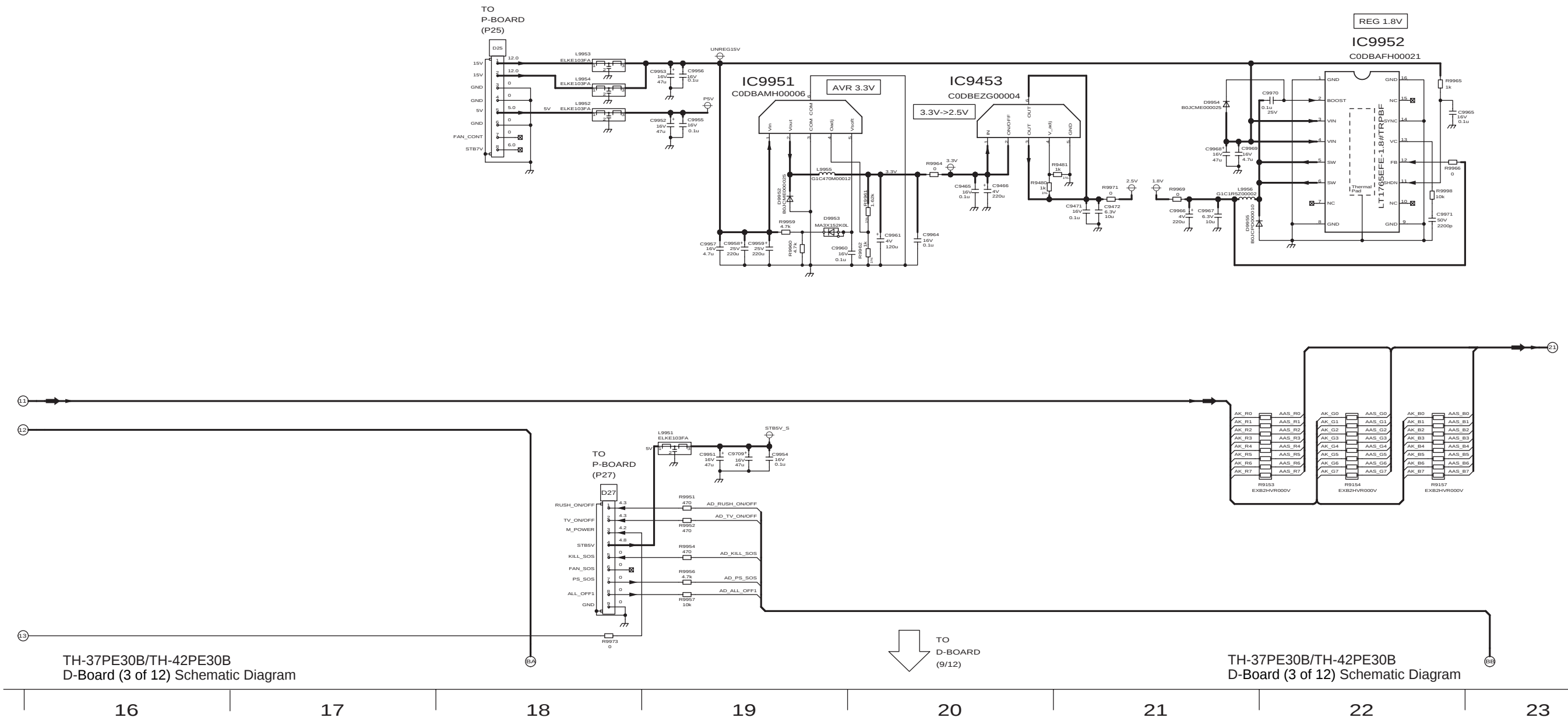
8 9 10 11 12 13 14 15

15.27. D-Board (3 of 12) Schematic Diagram

! D-BOARD TZTNP01UHSB (3/12)

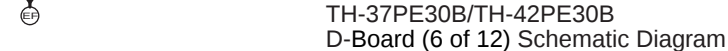
TO
D-BOARD
(2/12)

TO
D-BOARD
(4/12)





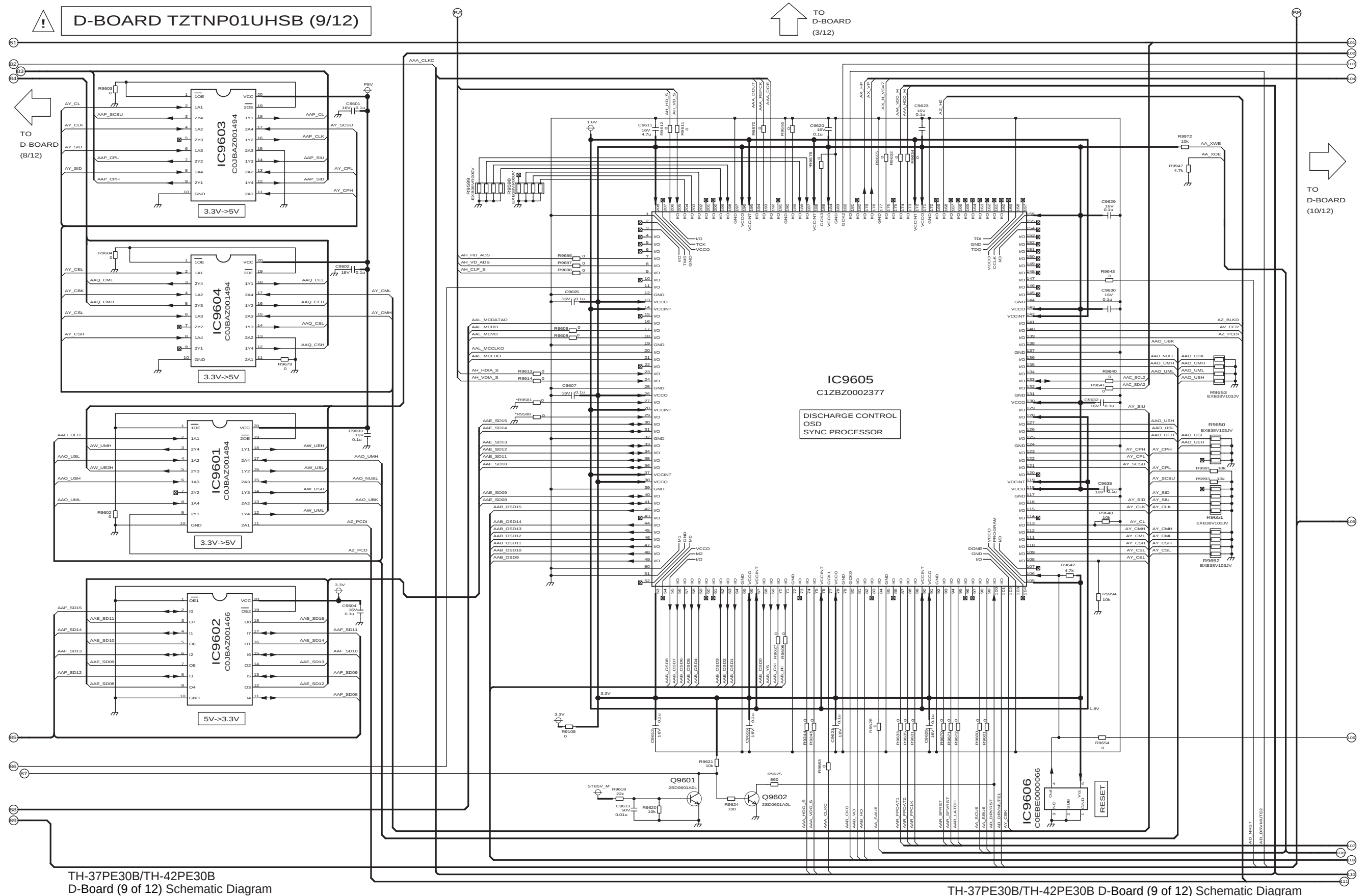




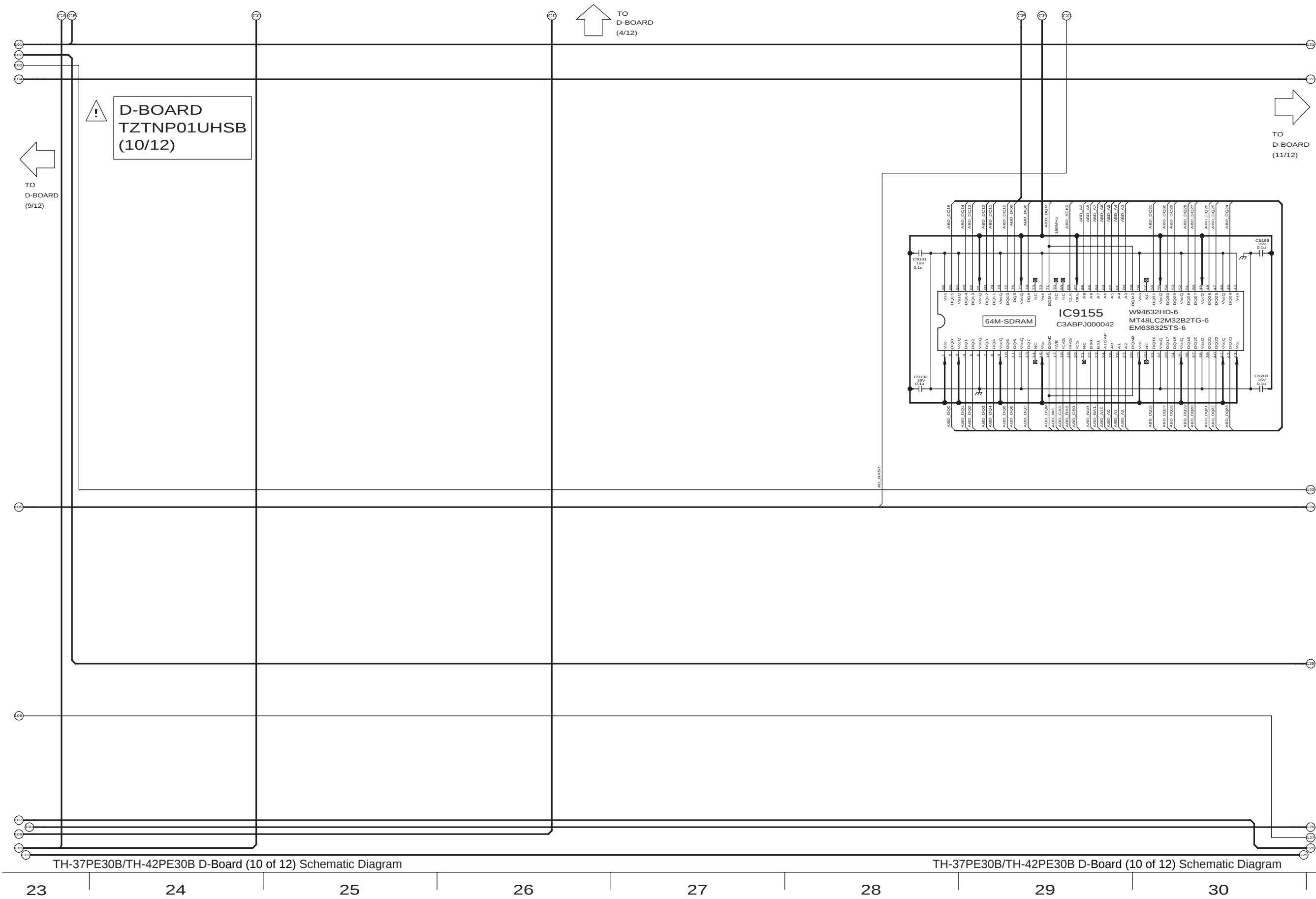




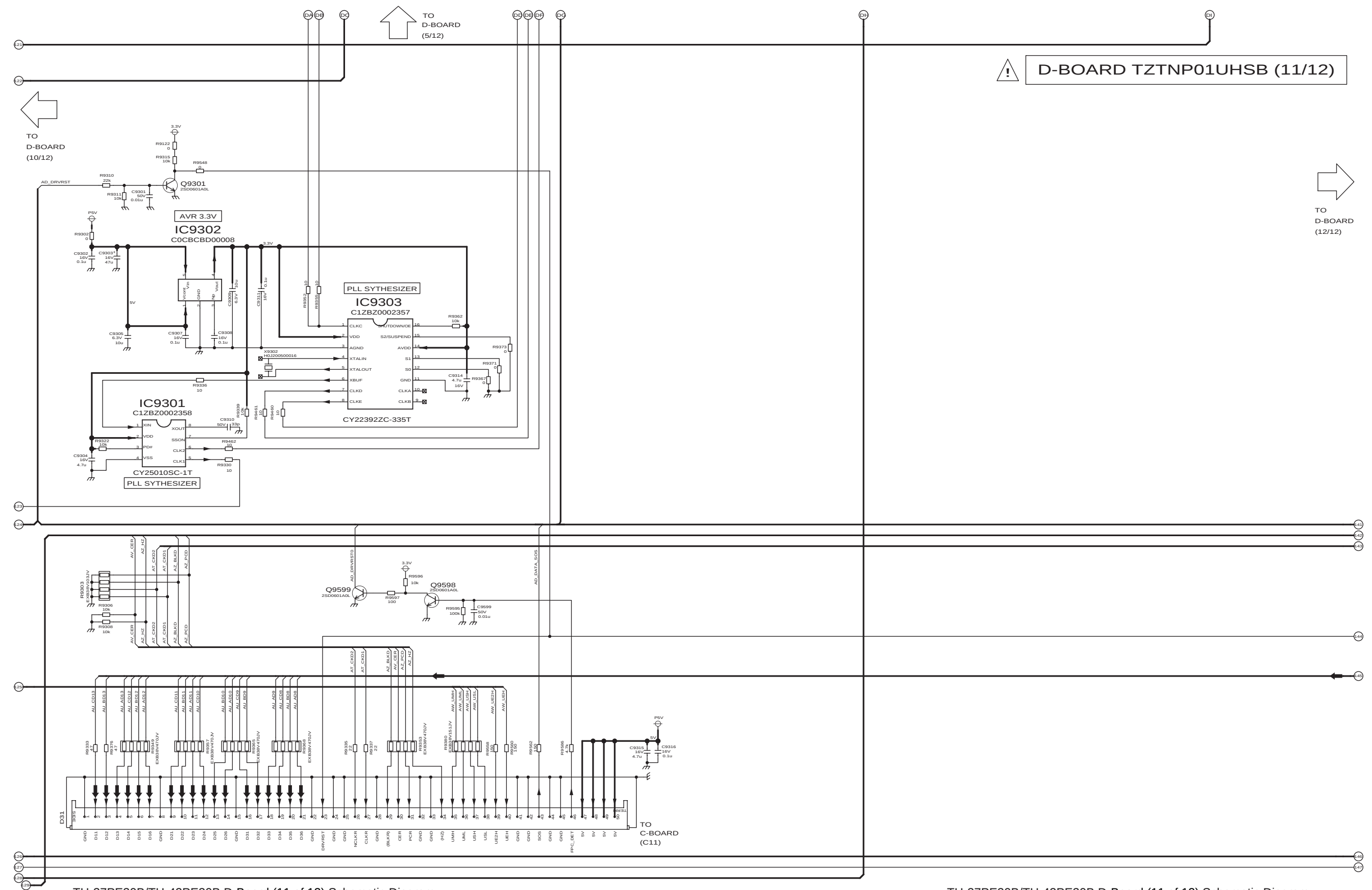
15.33. D-Board (9 of 12) Schematic Diagram



15.34. D-Board (10 of 12) Schematic Diagram

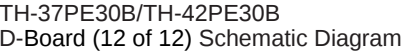


15.35. D-Board (11 of 12) Schematic Diagram

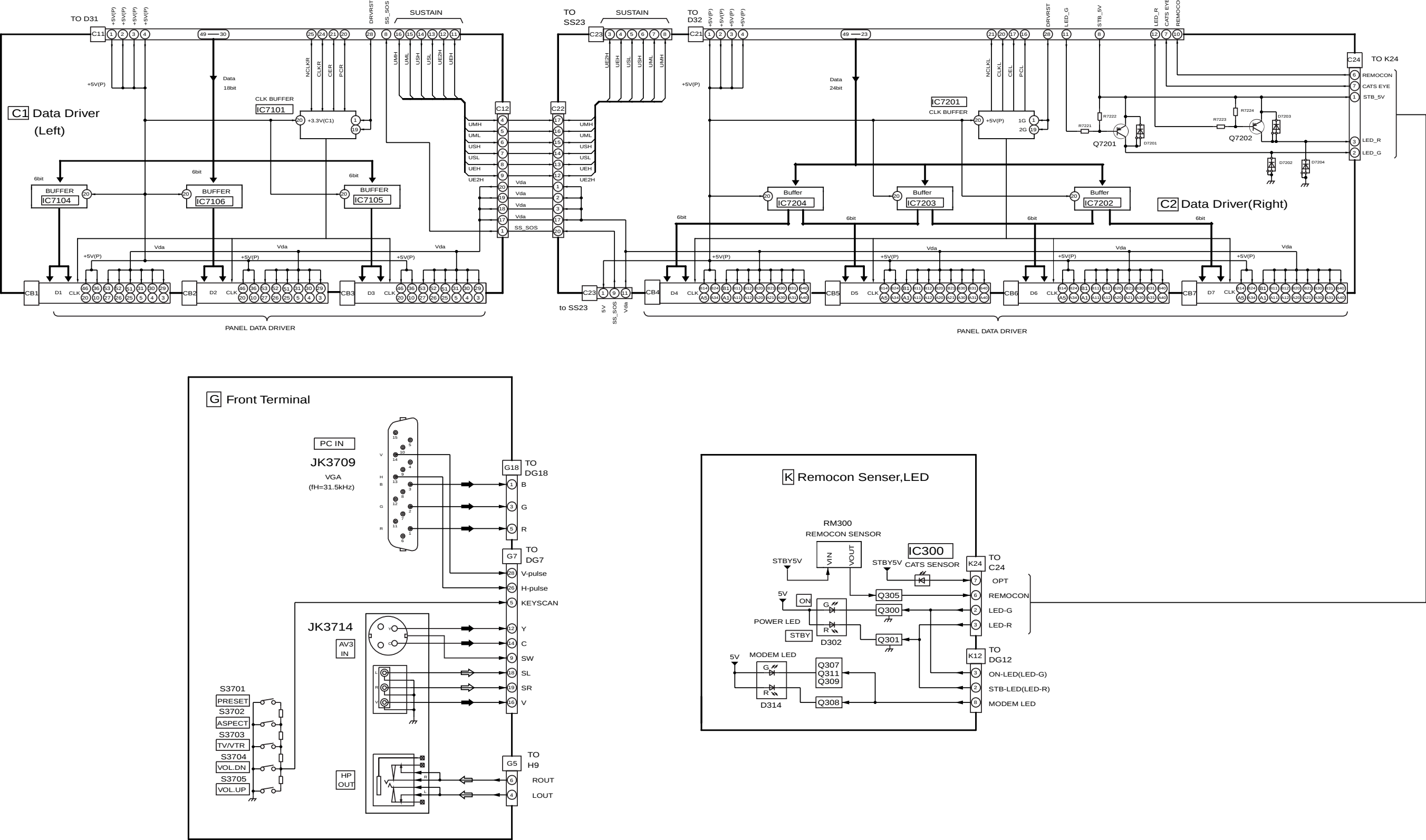


TH-37PE30B/TH-42PE30B D-Board (11 of 12) Schematic Diagram

TH-37PE30B/TH-42PE30B D-Board (11 of 12) Schematic Diagram



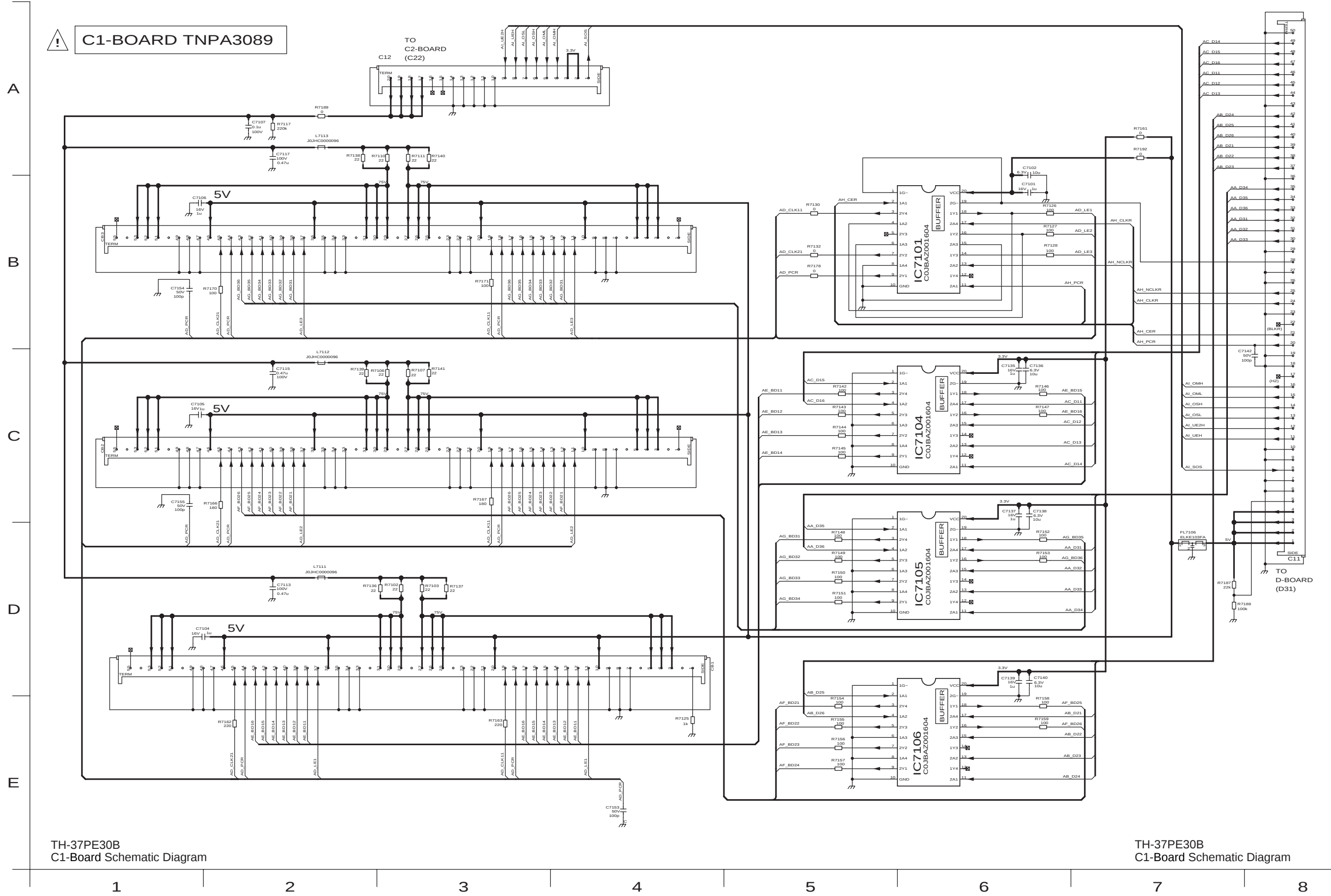
15.37. C1, C2, G and K-Board Block Diagram



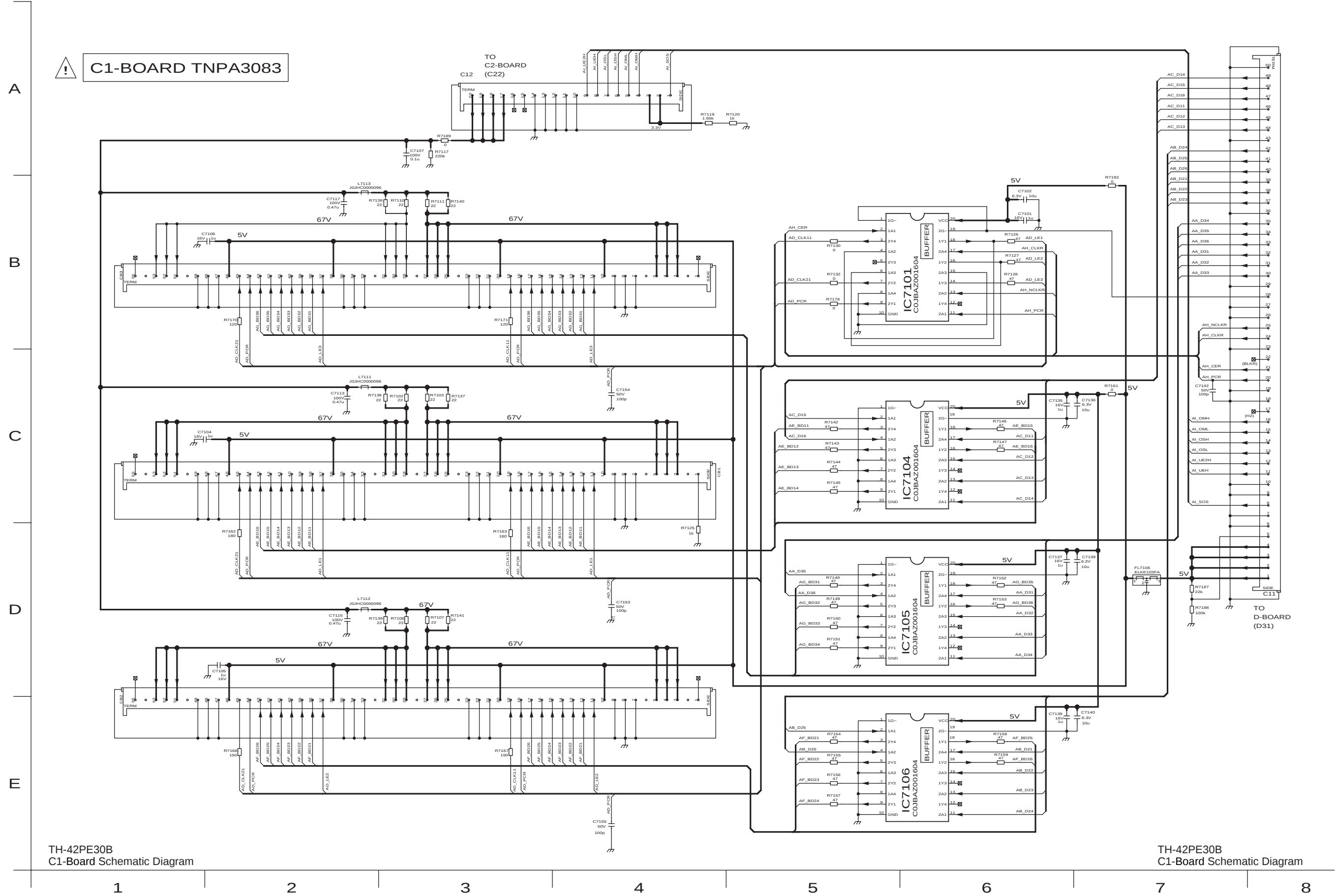
TH-37PE30B/TH-42PE30B C1, C2, G and K-Board Block Diagram

TH-37PE30B/TH-42PE30B C1, C2, G and K-Board Block Diagram

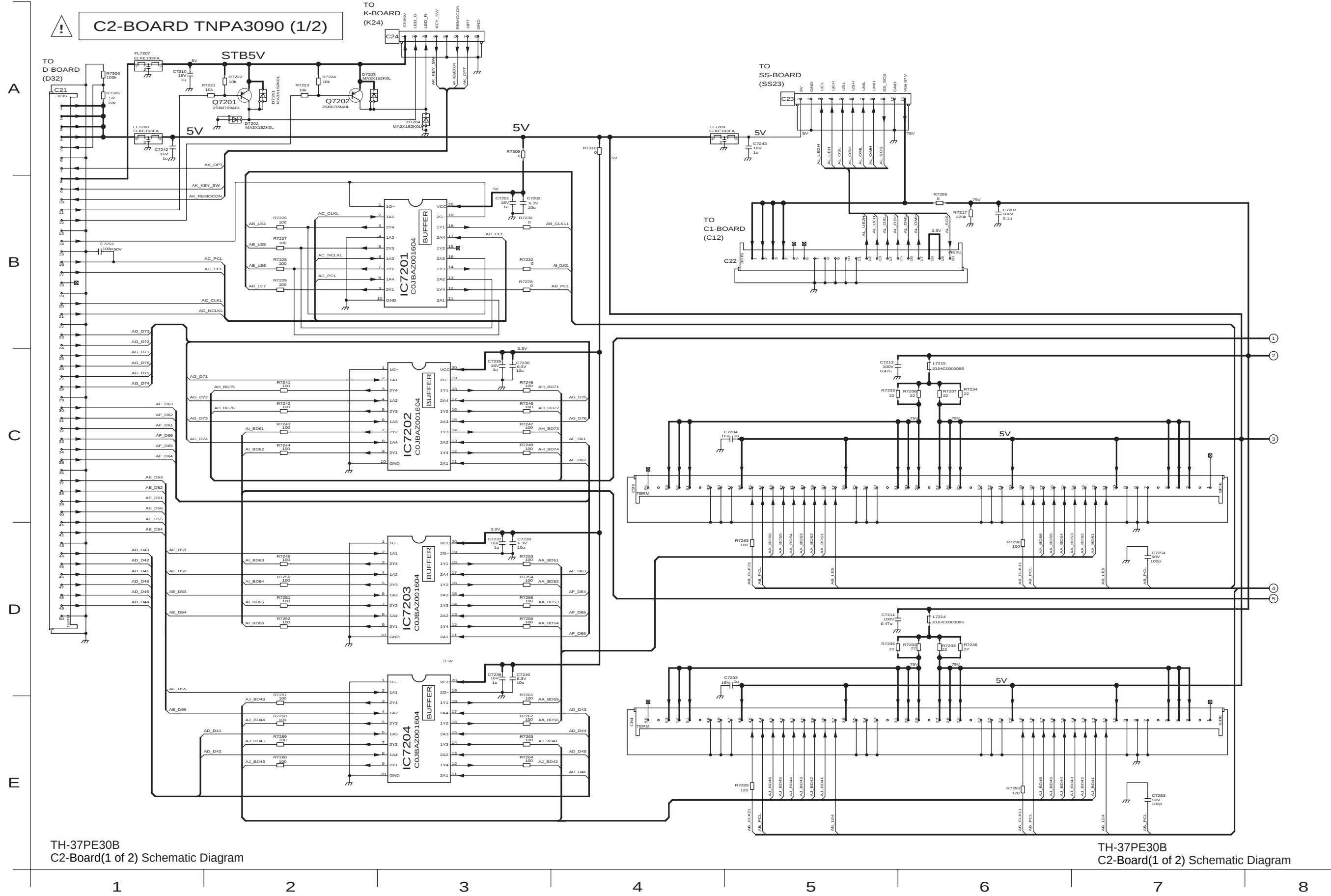
15.38. C1-Board Schematic Diagram (TH-37PE30B)



15.39. C1-Board Schematic Diagram (TH-42PE30B)

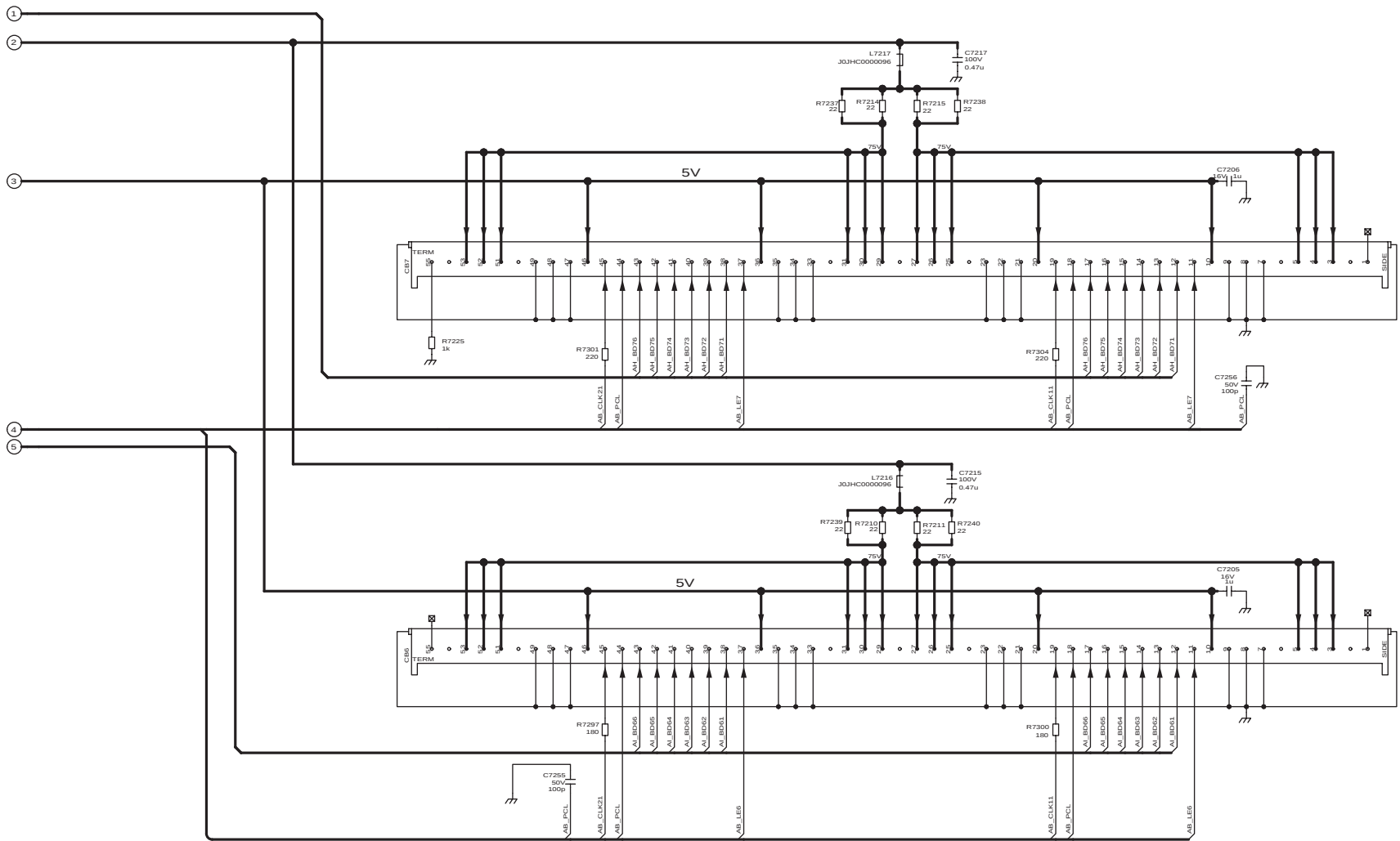


15.40. C2-Board (1 of 2) Schematic Diagram (TH-37PE30B)



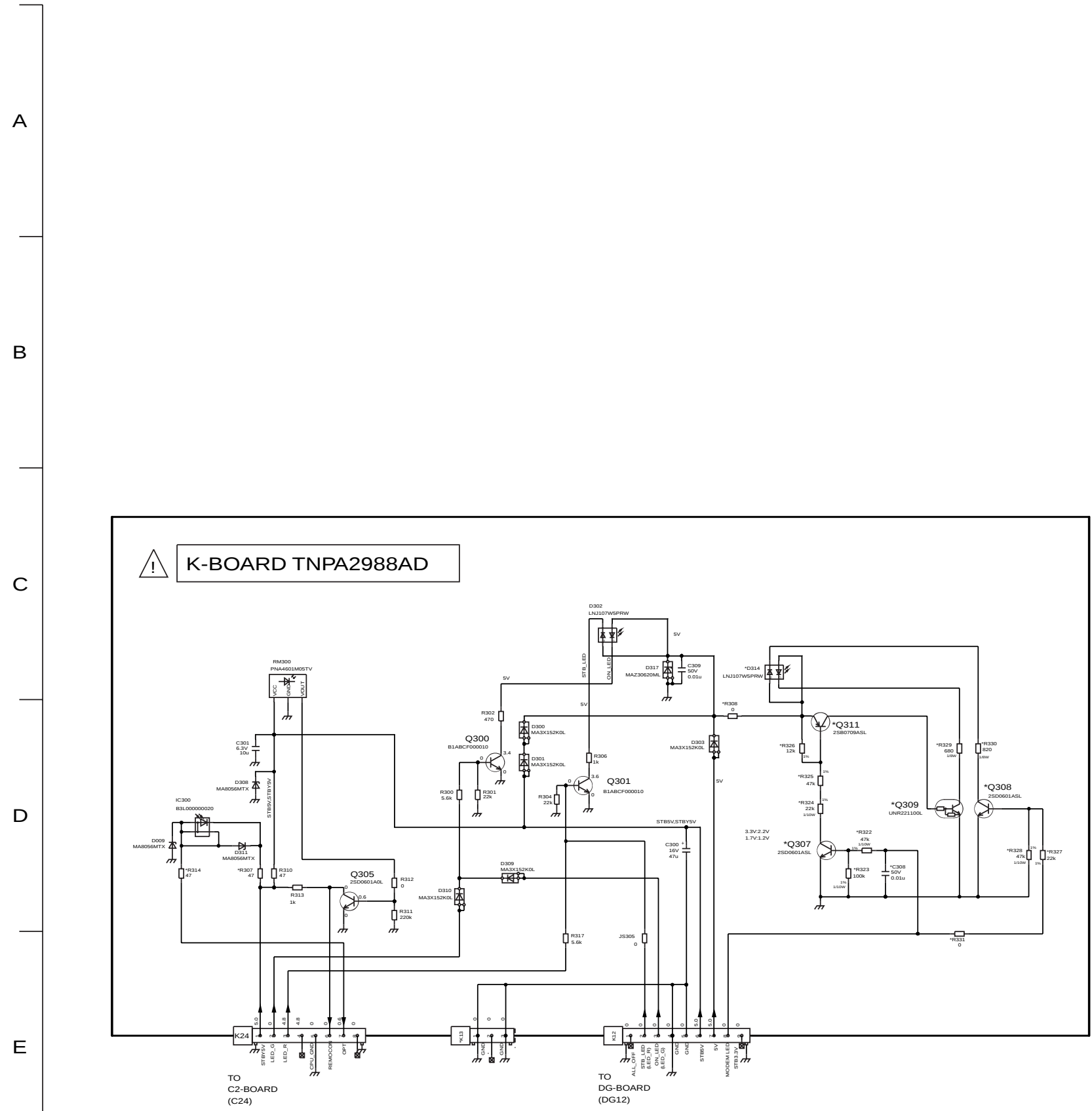
15.41. C2-Board (2 of 2) Schematic Diagram (TH-37PE30B)

 C2-BOARD TNPA3090 (2/2)





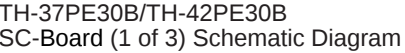
15.44. K-Board Schematic Diagram



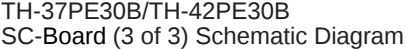
TH-37PE30B/TH-42PE30B K-Board Schematic Diagram

TH-37PE30B/TH-42PE30B K-Board Schematic Diagram

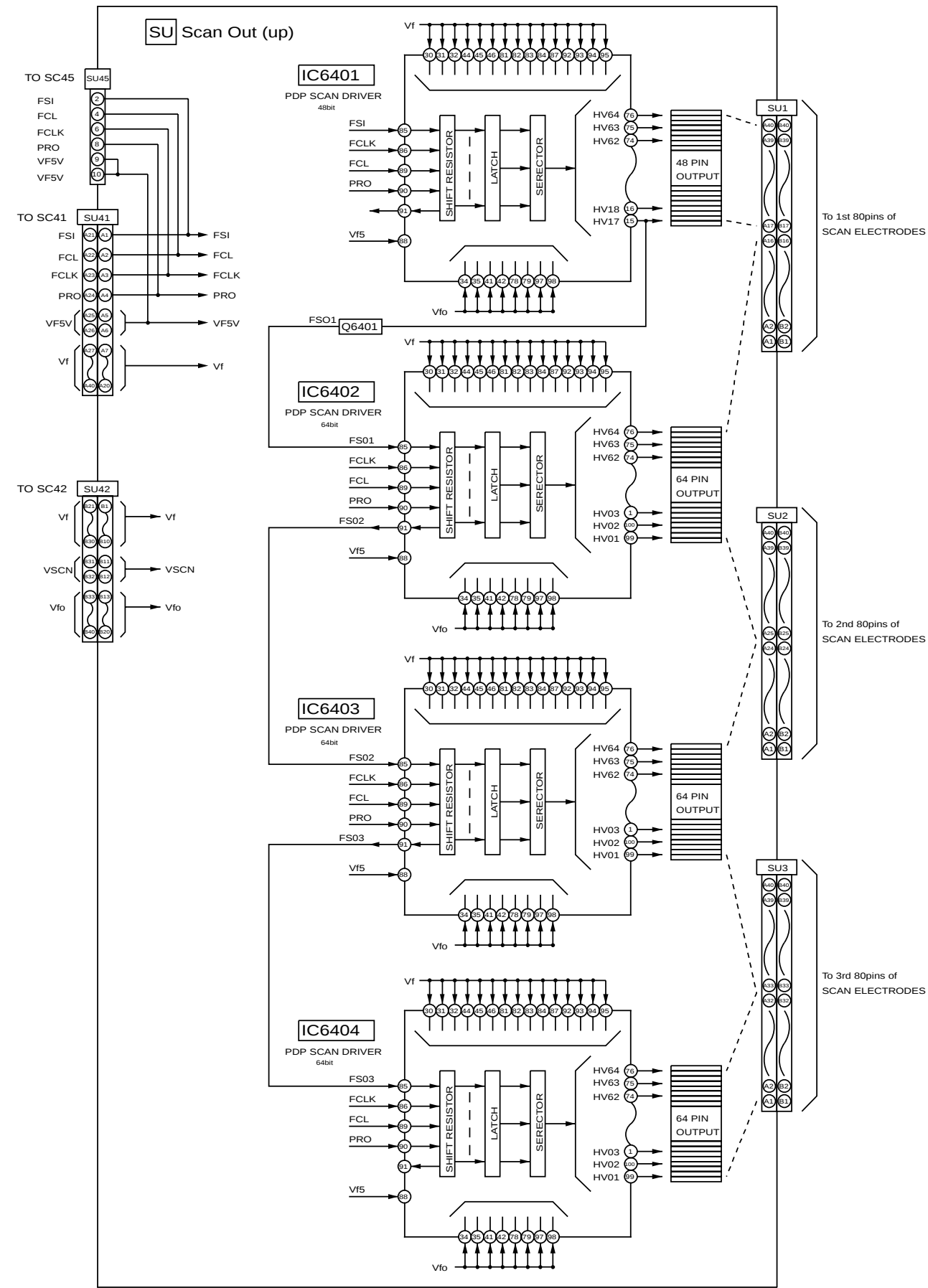








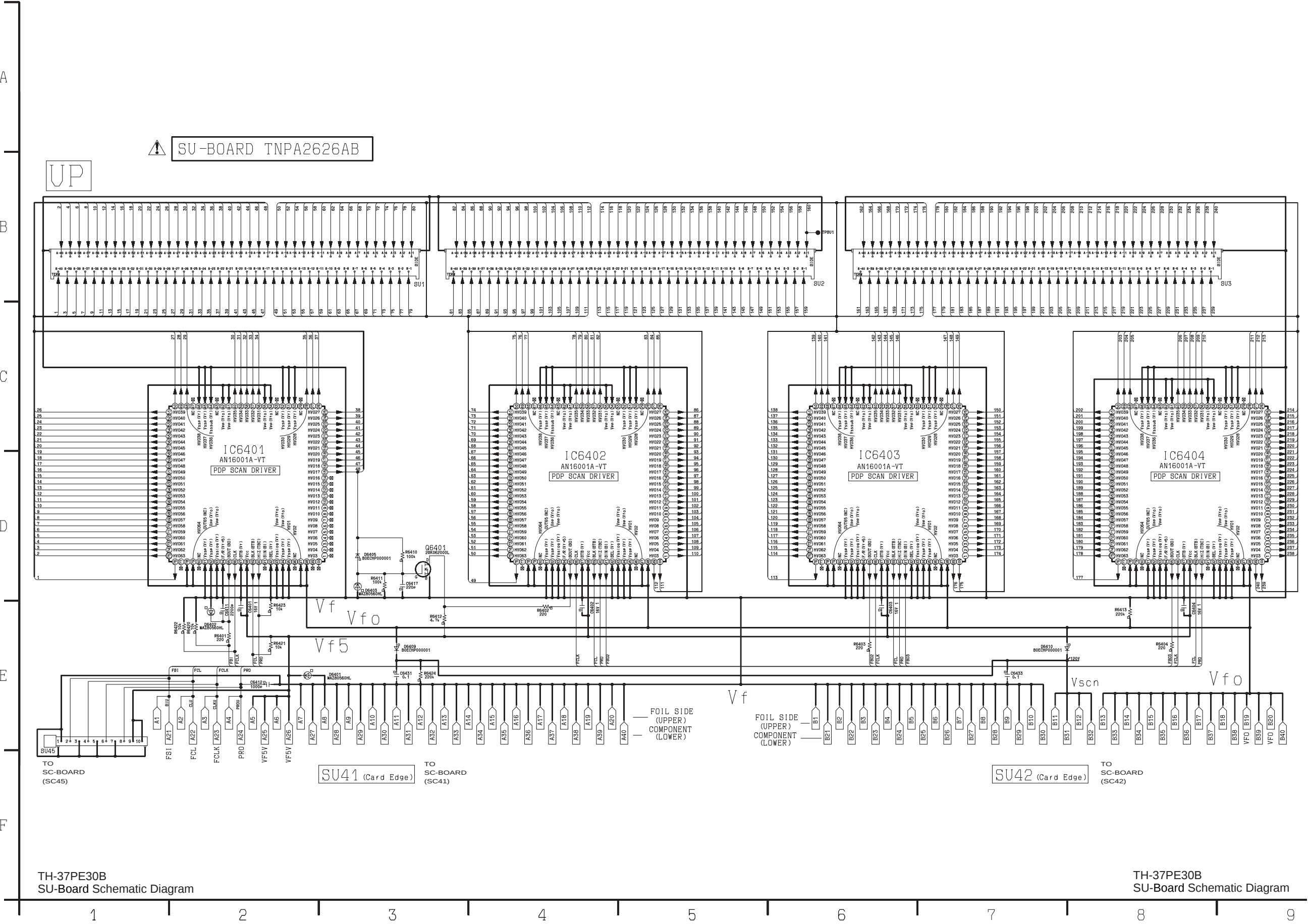
15.49. SU-Board Block Diagram



TH-37PE30B/TH-42PE30B
SU-Board Block Diagram

TH-37PE30B/TH-42PE30B
SU-Board Block Diagram

15.50. SU-Board Schematic Diagram (TH-37PE30B)

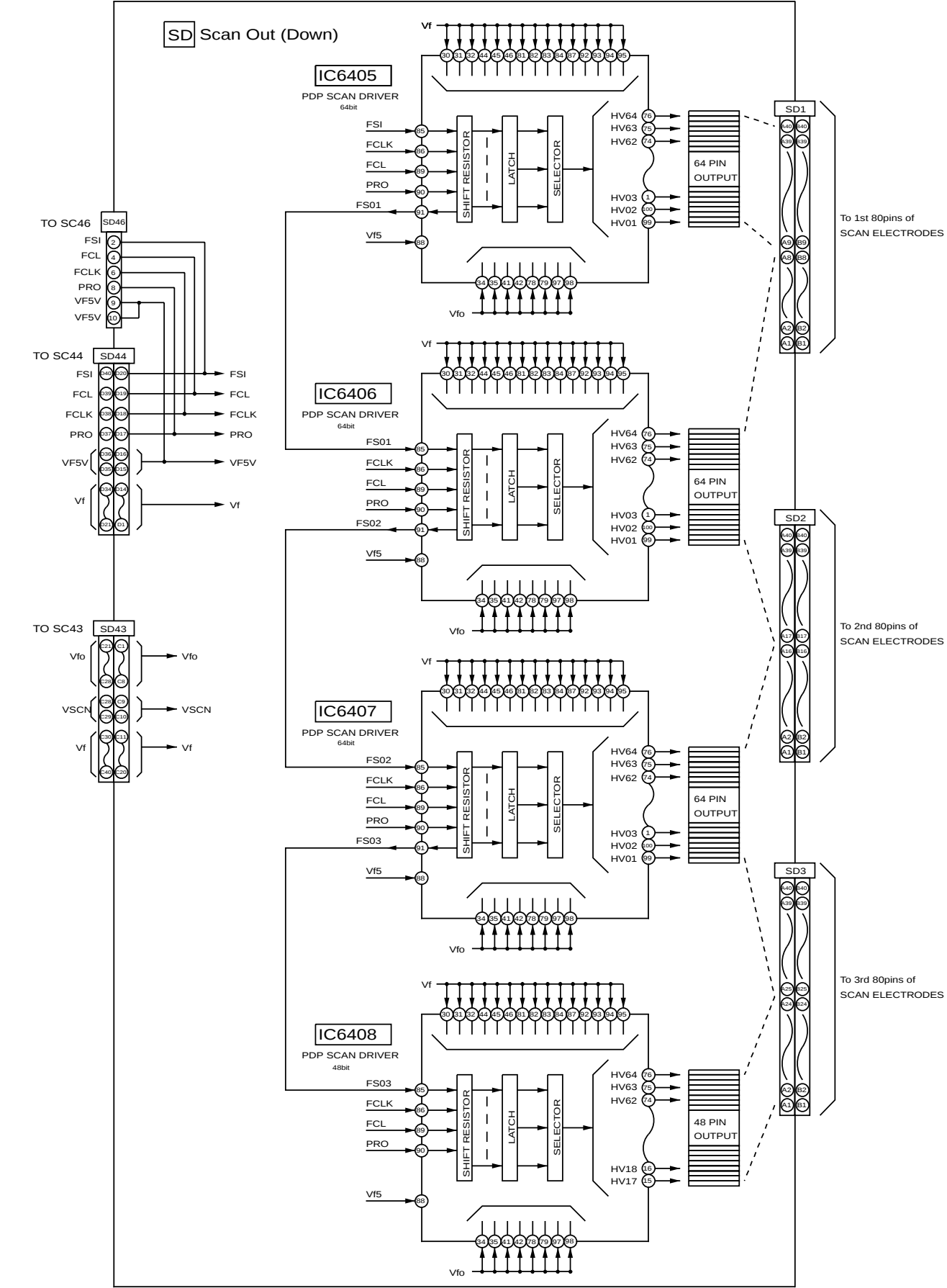


TH-37PE30B
SU-Board Schematic Diagram

TH-37PE30B
SU-Board Schematic Diagram



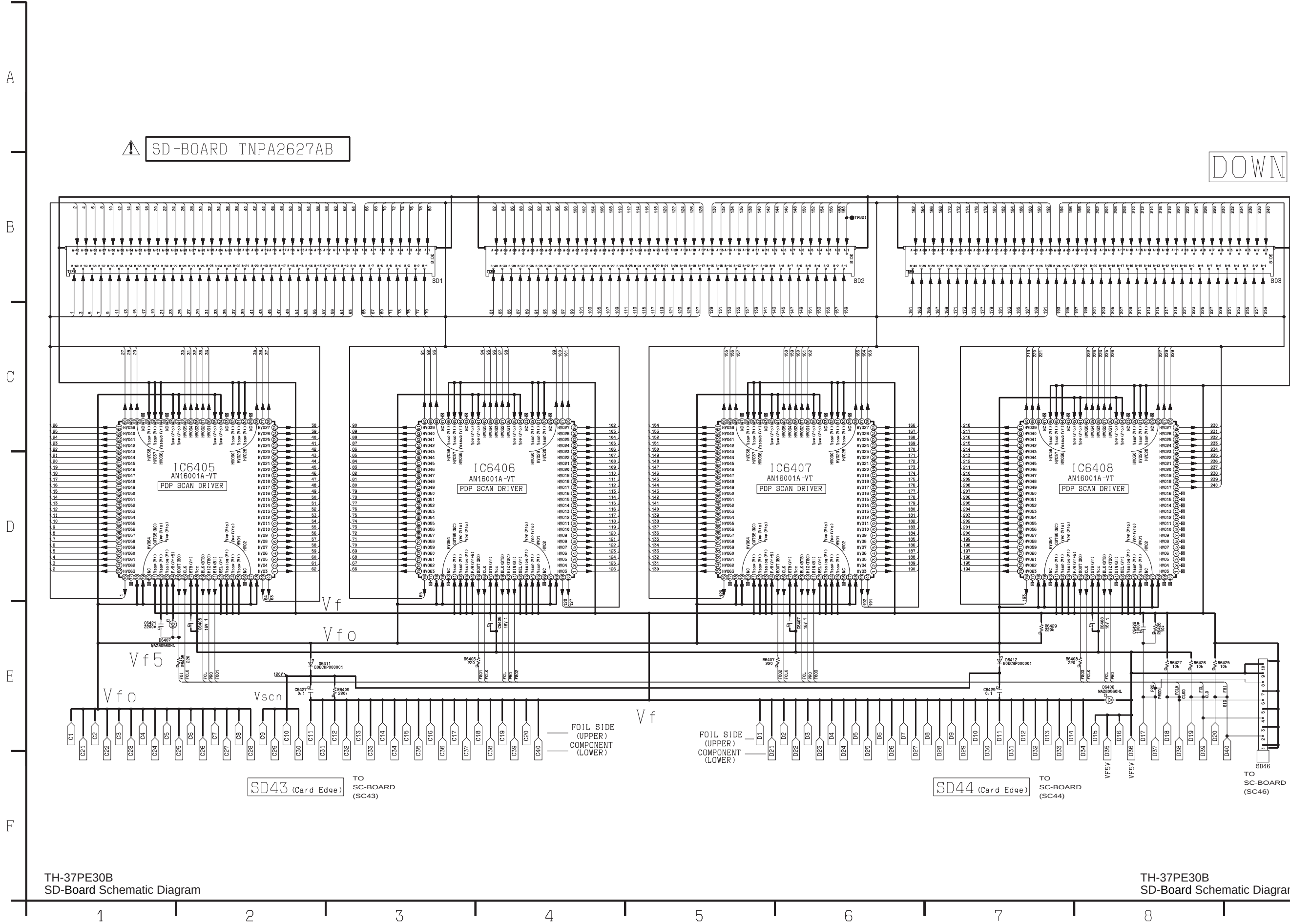
15.52. SD-Board Block Diagram



TH-37PE30B/TH-42PE30B SD-Board Block Diagram

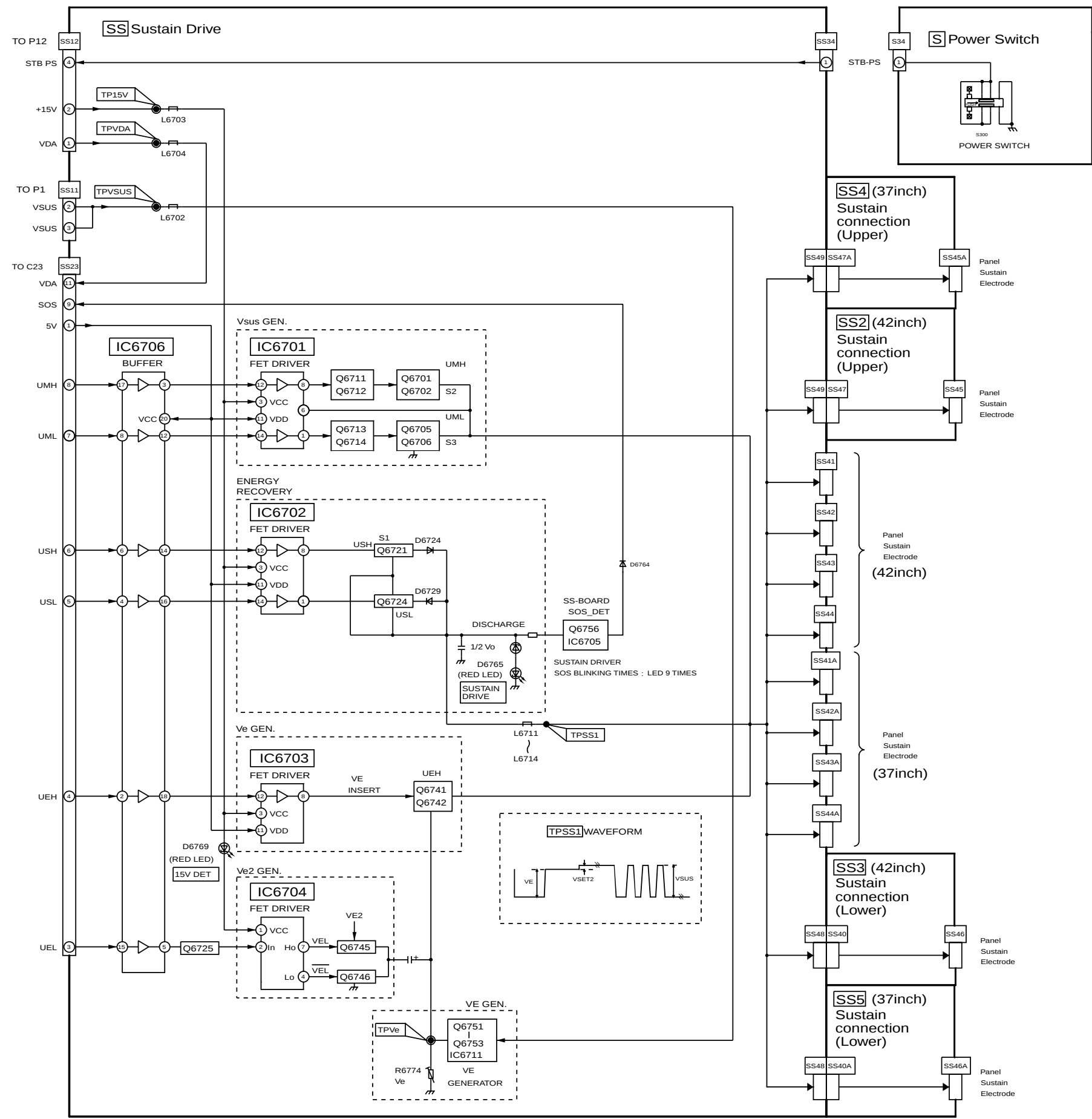
TH-37PE30B/TH-42PE30B
SD-Board Block Diagram

15.53. SD-Board Schematic Diagram (TH-37PE30B)



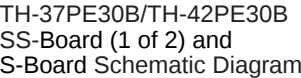


15.55. SS, S, SS2, SS3, SS4 and SS5-Board Block Diagram

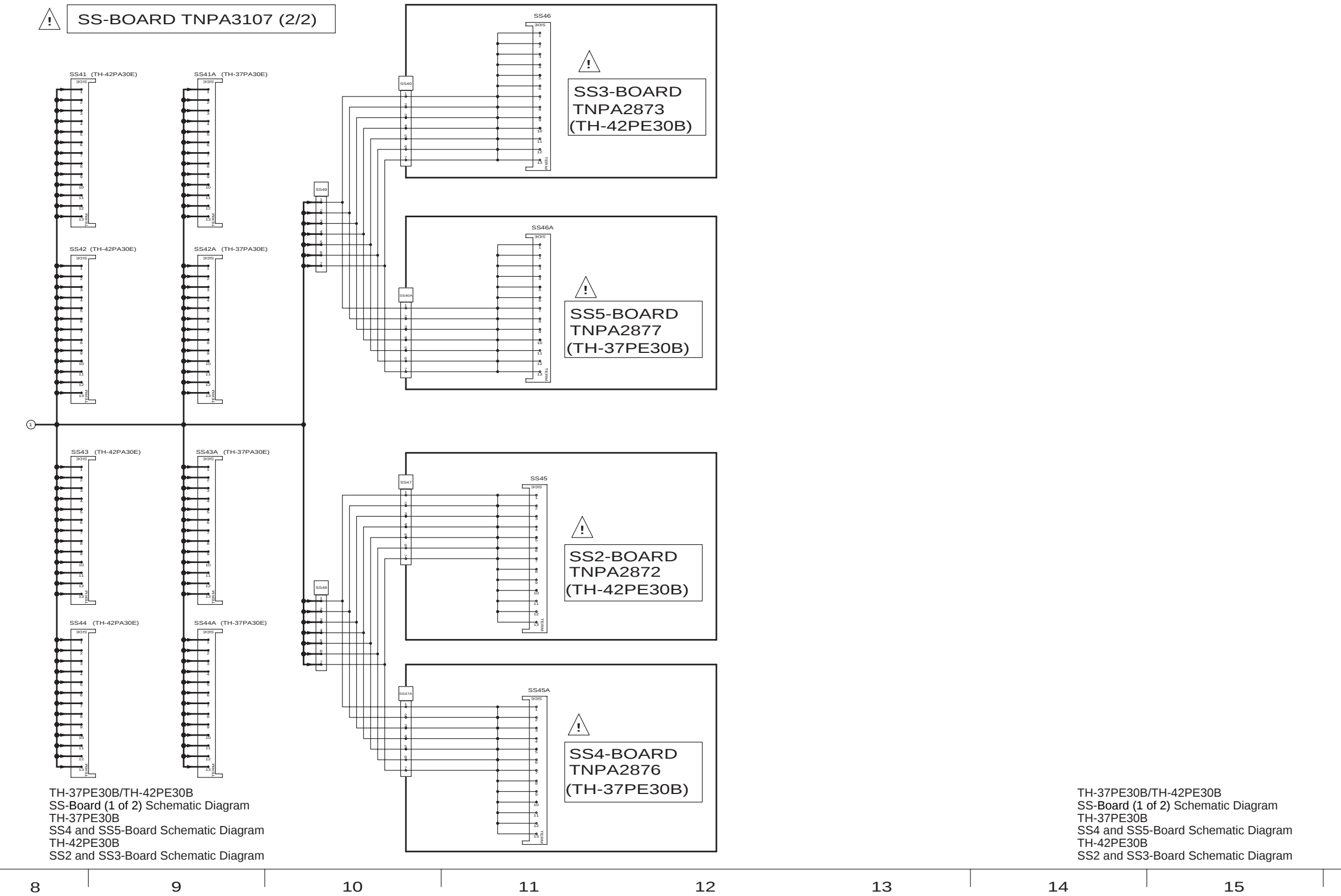


TH-37PE30B/TH-42PE30B
SS, S, SS2, SS3, SS4 and SS5-Board
Block Diagram

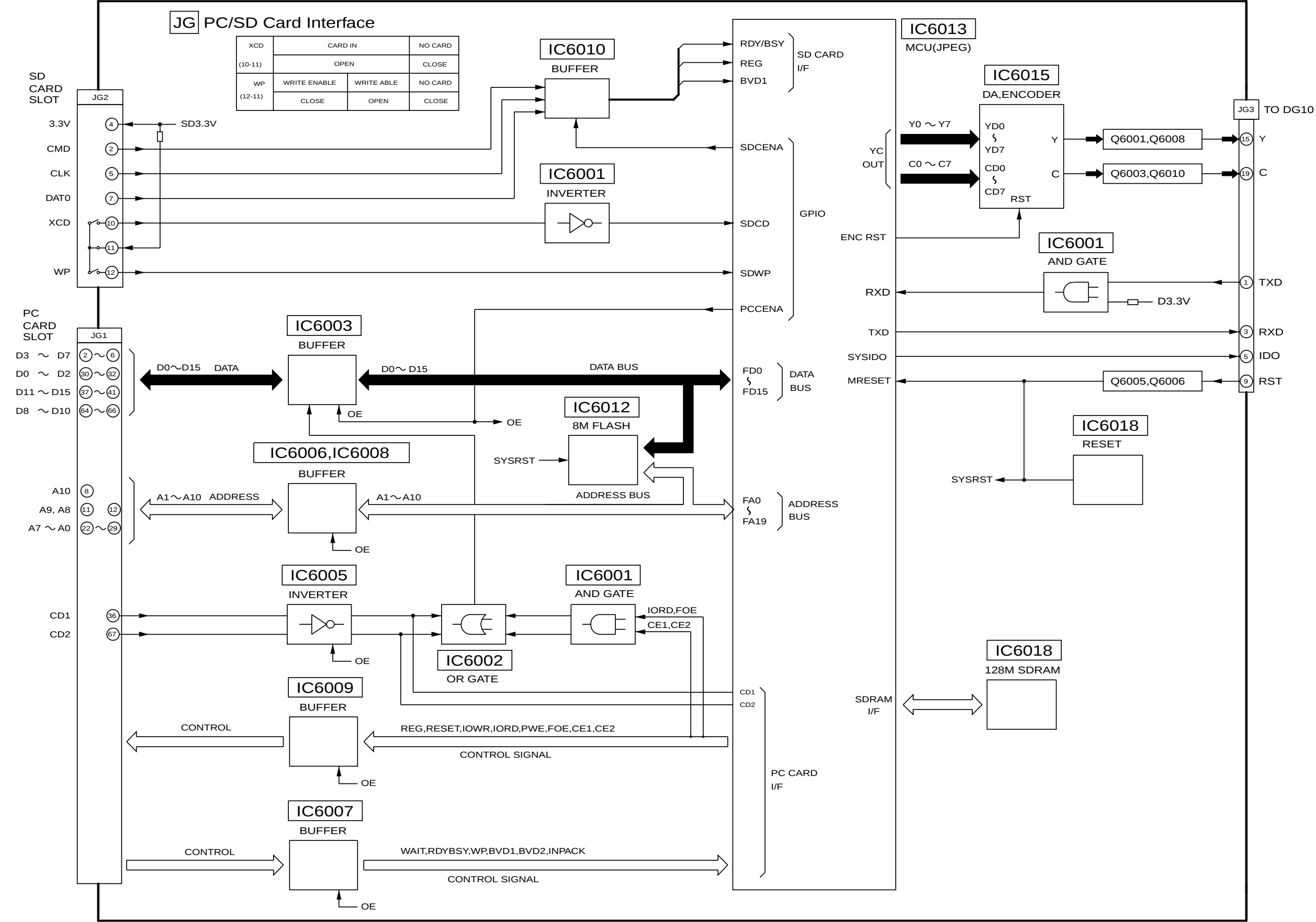
TH-37PE30B/TH-42PE30B
SS, S, SS2, SS3, SS4 and SS5-Board
Block Diagram



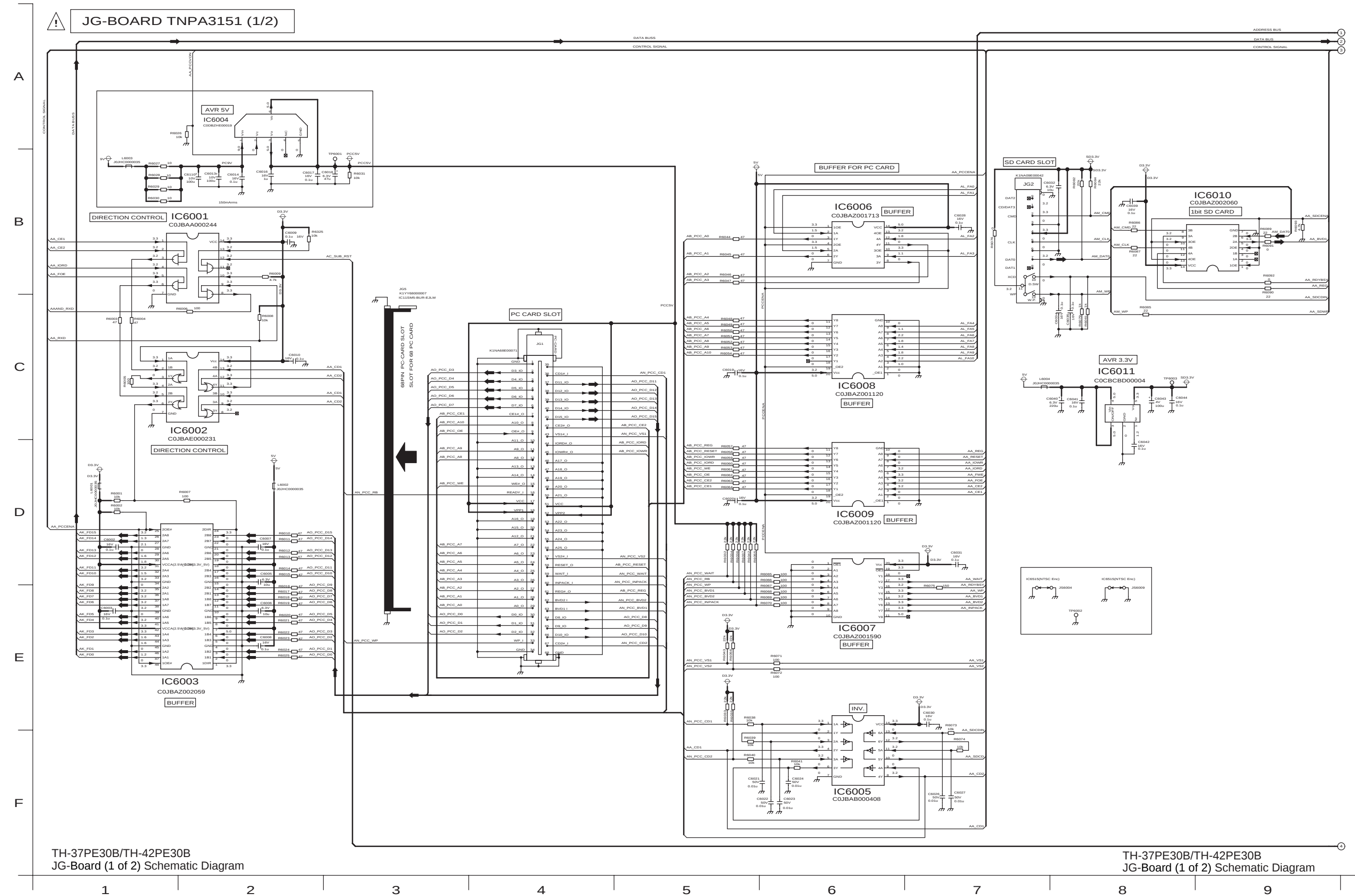
15.57. SS-Board (2 of 2) SS2, SS3, SS4 and SS5-Board Schematic Diagram



15.58. JG-Board Block Diagram

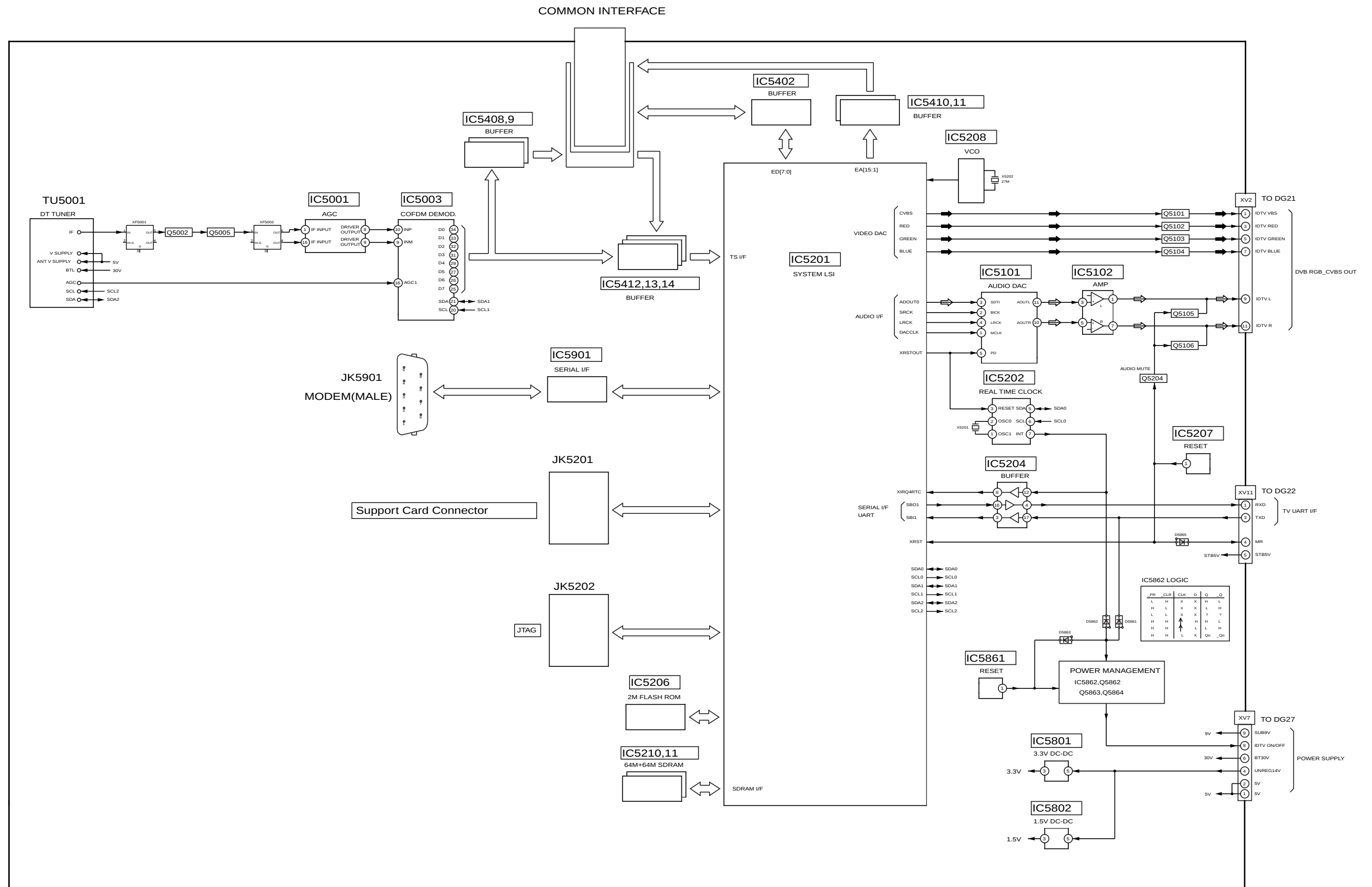


15.59. JG-Board (1 of 2) Schematic Diagram



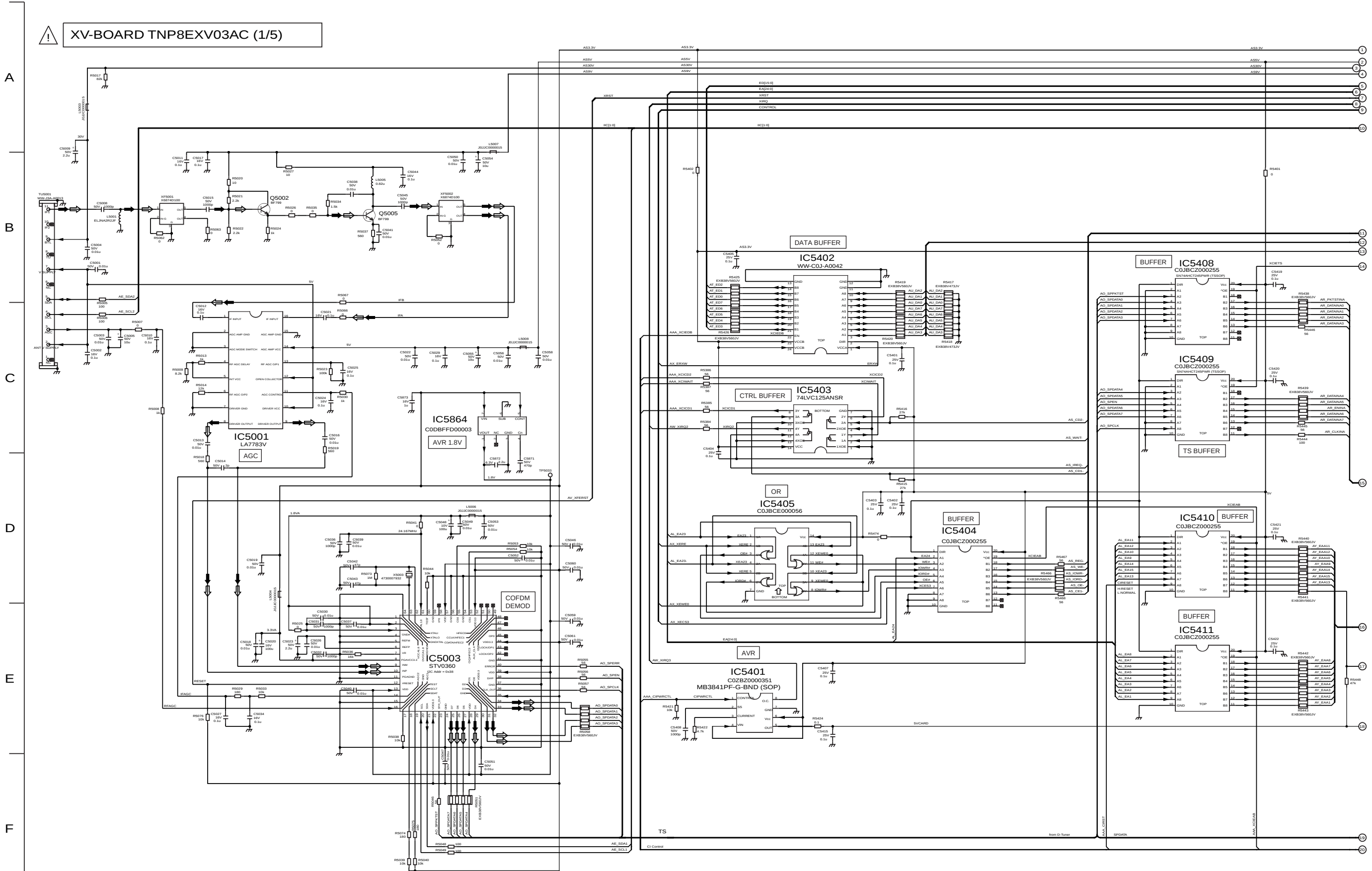


15.61. XV-Board Block Diagram



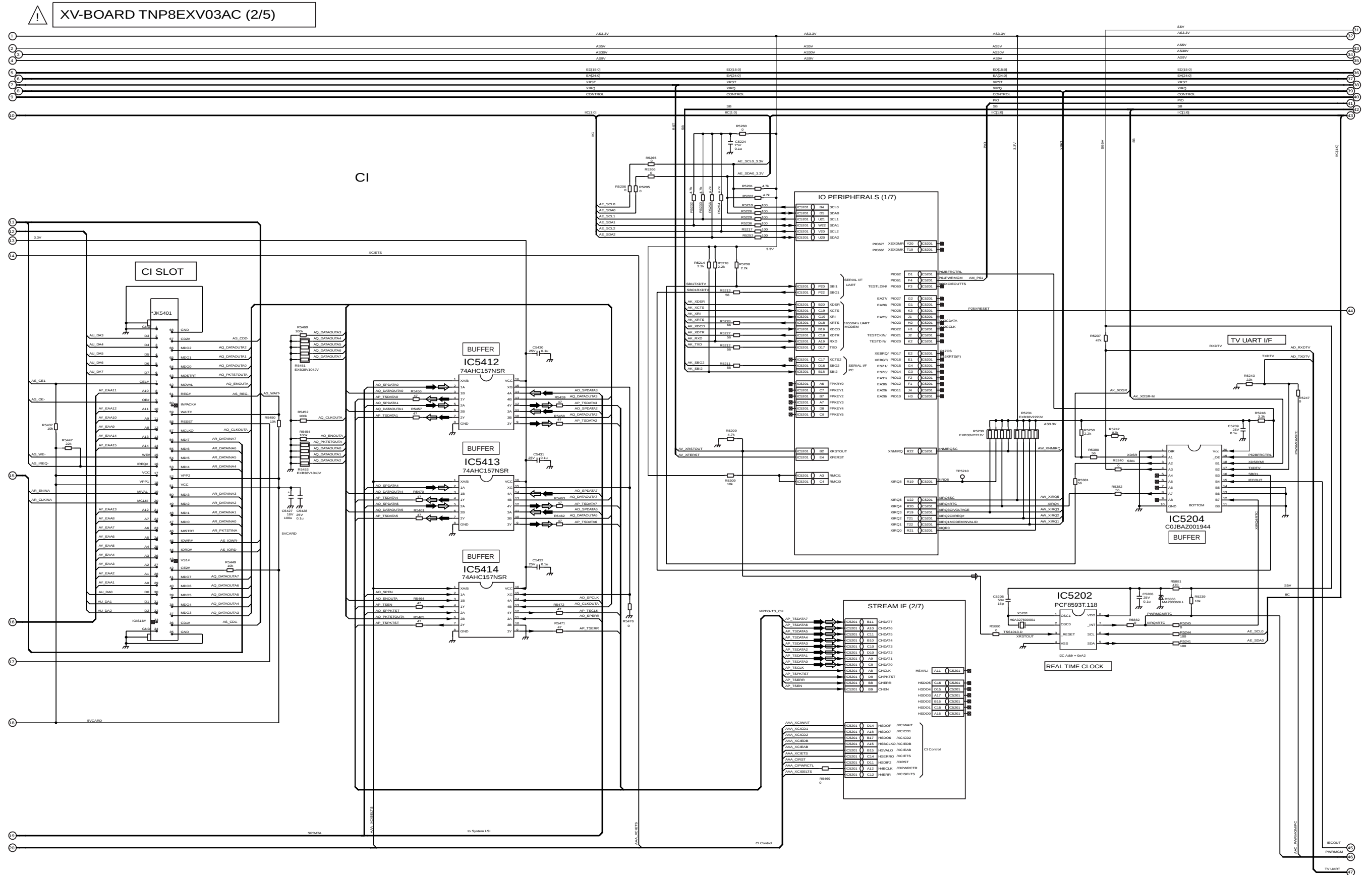
TH-37PE30B/TH-42PE30B XV-Board Block Diagram

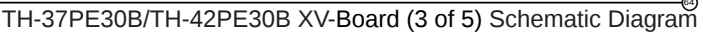
TH-37PE30B/TH-42PE30B XV-Board Block Diagram



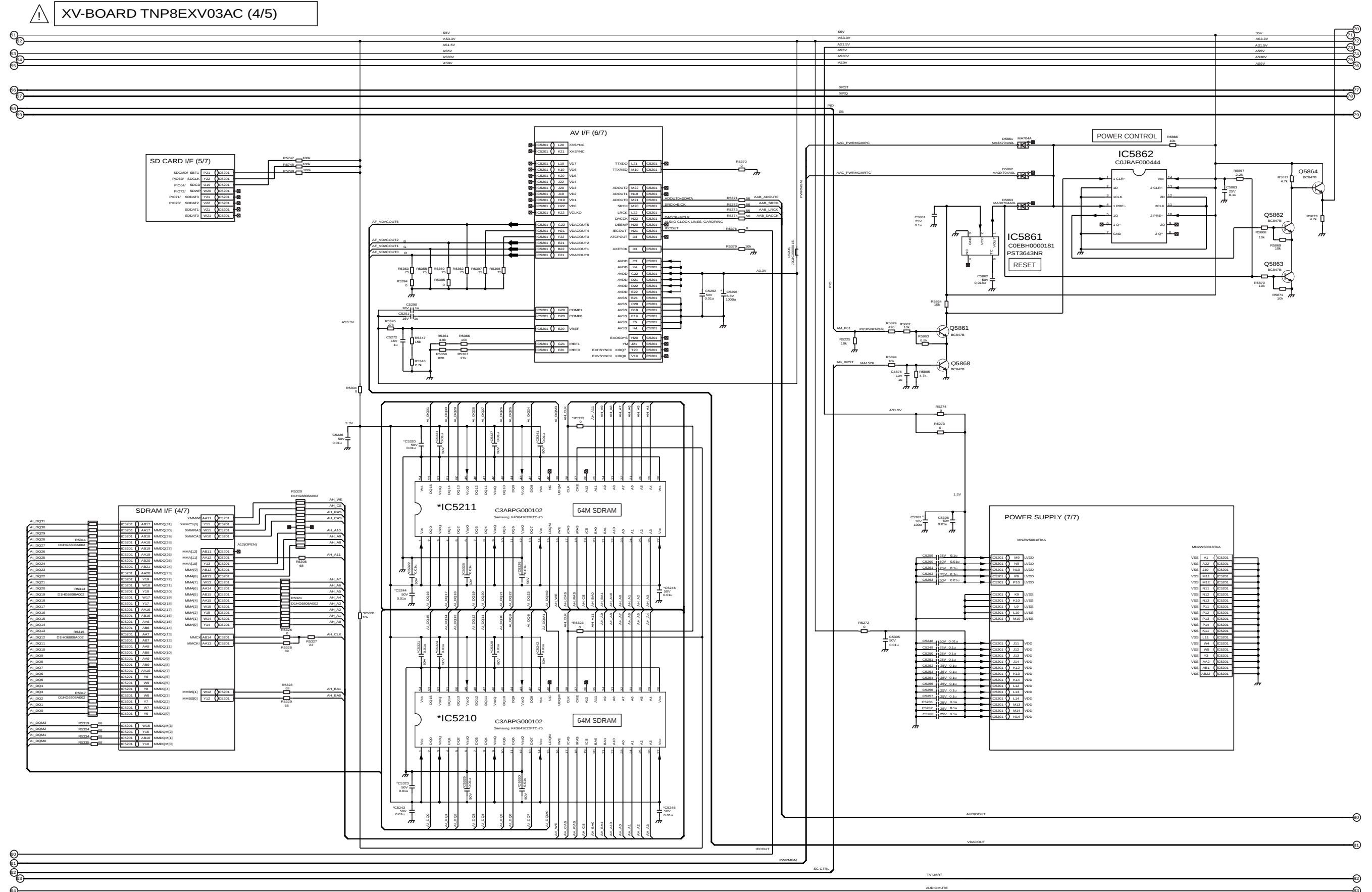
TH-37PE30B/TH-42PE30B XV-Board (1 of 5) Schematic Diagram

15.63. XV-Board (2 of 5) Schematic Diagram





15.65. XV-Board (4 of 5) Schematic Diagram

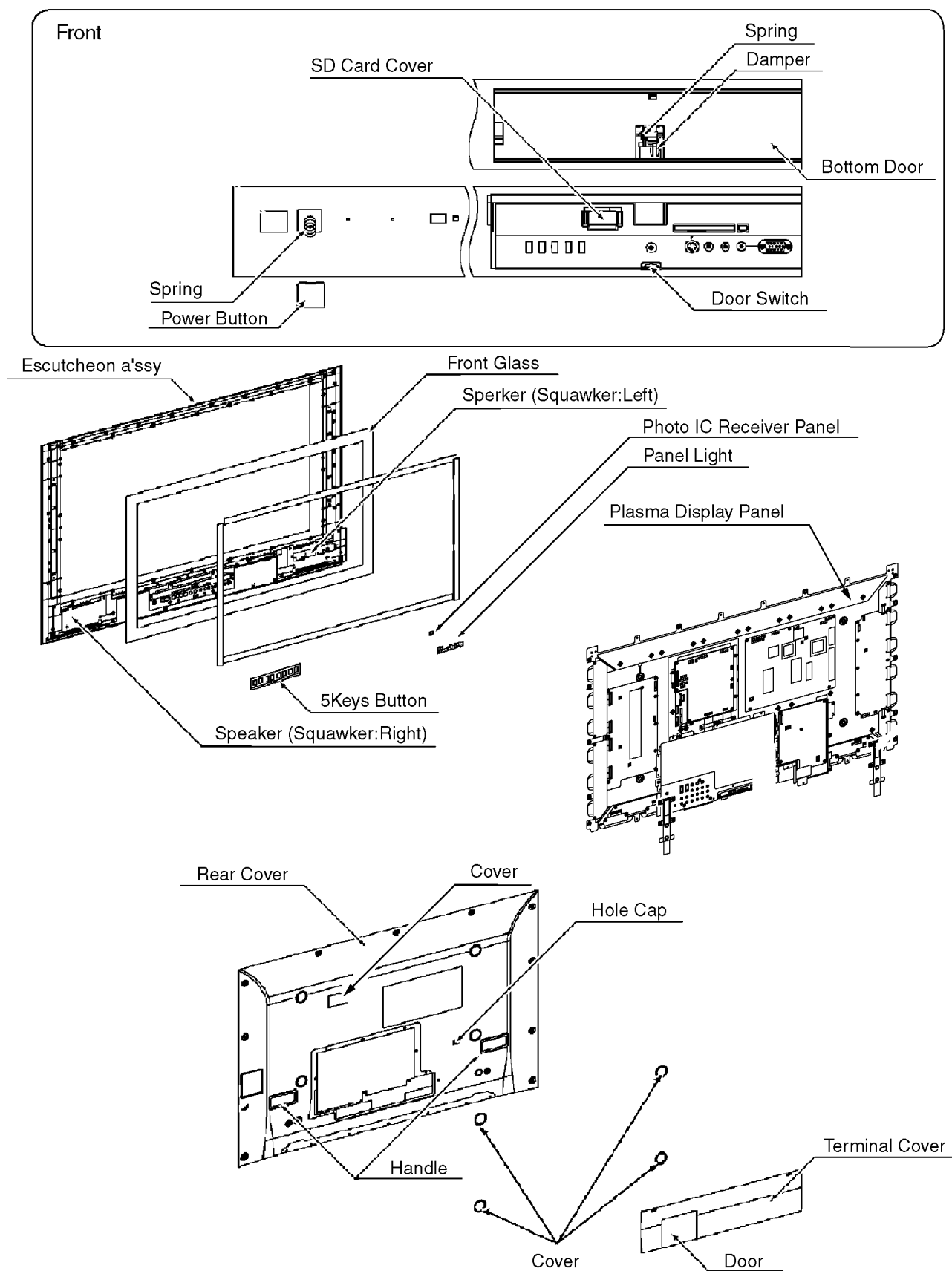




TH-37PE30B/TH-42PE30B XV-Board (5 of 5) Schematic Diagram

TH-37PE30B/TH-42PE30B XV-Board (5 of 5) Schematic Diagram

16 Parts Location



17 Packing Exploded Views

